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ABSTRACT

This second volume of four which comprise the final report on the Educational Laboratory Theatre Project (1966-1970) is composed of the following chapters: (1) The End-of-the-Project Questionnaire: Additional Analyses; (2) Alumni Clubs; (3) The Curriculum Portfolios and Teachers' Uses of Them; (4) Drama in the Secondary English Class; Actor and Educator Objectives; (5) Students' Objectives for Drama in the Secondary School; (6) Summary of the Experimental Study of Relationships Between Classroom Study of Drama and Attendance at the Theatre; (7) A Study of the Effects of the New Orleans Touring Show (1969); (8) An AUDIENCE Reaction Study; (9) A Review of Literature on Prejudice, Identification, Interraciality and Attitude Change; (10) Students' Semantic Differential Ratings of Elements of an Interracial Theatre Production; (11) Three Studies of the Preferences of Students of Different Races for Actors in Interracial Theatre Productions; and (12) The Responses of Black and White Students to Photographs of an Interracial Dramatic Situation. (See also TE 002 126, TE 002 128, and TE 002 129.) (MF)

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final report

educational laboratory theatre project 1966-70

volume 2

studies

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The four volumes of the Final Report of the Educational Laboratory Theatre Project are:

I - Reactions & Assessments
II - Studies
III - The Coordinator's Report on the ELT Project in Los Angeles
IV - Professional Theatres in the Schools

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Preface

Since some readers may be interested in the substance of this report although they are not thoroughly familiar with the details of the Educational Laboratory Theatre Project, we are prefacing the volume with the brief description of the Project which follows. The description is based upon one written by Mr. Junius Eddy, now of the Ford Foundation, who served as the Project's coordinator in the Office of Education from its beginnings through the summer of 1969.

Development of the Program

The Educational Laboratory Theatre Program was born during the summer of 1965. It was conceived as a cooperative interagency venture, involving programmatic support from the National Endowment for the Arts and two Bureaus of the U.S. Office of Education, aimed broadly at exploring the ways in which an institution of the arts can join with the schools to make theatre education a vital and relevant factor in the educational process.

The plan envisioned the establishment of a resident theatre company of top professional calibre, in two or three major cities of the United States, to provide secondary school students with an encounter in first-rate live theatre. Its purposes were several: 1) to stimulate concomitant learnings from this encounter which would carry over into English, history, social studies, and other courses, even including the sciences; 2) to provide a research situation in which to assess the impact of this theatrical encounter on the secondary school student; 3) to make it possible for plays to be presented for the adult community on weekends; and 4) to provide the basis for such a resident company to continue serving the community and the schools with its own funds after the laboratory theatre had run its course.

Overall, the focus of the program is on the educational values of exposing high school students to regular experiences in living theatre; the Project sought to build on these experiences to increase students' perceptual and communications skills, to enhance their academic work in other disciplines, and to develop increased enjoyment from the study of world literature generally.

In terms of Federal support, the project was conceived as a three-year venture, contingent, of course, on annual appropriations and, to some extent, on the degree of community response, cooperation, and support.

A number of cities were considered as potential sites, but only in Providence and New Orleans was it initially possible to bring together all of the complex factors essential to the establishment of the projects beginning in the fall of 1966. These factors included the interest and commitment of local school officials, the willingness and ability of community leaders to provide a theatre, and the availability of Title III (Elementary and Secondary Education Act) funds, among others.

School officials in New Orleans and Providence submitted Title III proposals by the May 25, 1966, deadline; these were subsequently approved, additional Title IV funds were committed, and contracting negotiations were completed in time to make the projects operational in each city that fall. Funds from the National Endowment for the Arts were made available earlier in the summer to both theatre companies, to enable them to recruit the necessary members of the professional companies, and to move into production for an October opening performance for students in Providence and a mid-November opening in New Orleans.

An independent nonprofit organization--Repertory Theatre, New Orleans--was set up by civic and cultural leaders in the New Orleans metropolitan area to manage and operate the production company. In Providence, an existing theatre company--The Trinity Square Repertory Company--was designated as the producing organization for the Rhode Island project.

During 1966-67, the Trinity Square company presented (to 35,000 high school students throughout the State of Rhode Island) a series of four productions: St. Joan; Ah Wilderness; A Midsummer Night's Dream; and The Three Sisters. These plays were augmented by several additional productions to form an adult subscription series which was offered to the community-at-large in evening performances. Student plays were presented in the Rhode Island School of Design Auditorium, while the additional plays in the adult series were performed in the Trinity Square Theatre, the group's limited capacity home playhouse.

Repertory Theatre New Orleans, performing in the downtown Civic Theatre, presented Charley's Aunt, Romeo and Juliet, Our Town, and The Rivals during 1966-67. Some 38,000 students in grades 10, 11, and 12 from high schools in the New Orleans metropolitan area attended these productions, which were also offered as an adult subscription series three evenings each week.

In each location, carefully designed instructional materials and teacher guides for all school productions were prepared for classroom use, and members of the theatre company made extensive school visits to augment the instructional program in student and teacher workshops, assembly presentations, demonstrations, and classroom discussions. These activities (as well as organization of the bussing schedules) were coordinated by school personnel, working closely with the theatre staff.

In addition to the financial support provided locally to help underwrite the cost of leasing the theatres, funding was derived from three separate Federal programs. During the first year, approximately $300,000 was provided from the Title III, ESEA program to each of the two projects; Title IV of ESEA provided approximately $176,000 to each project; and the National Endowment for the Arts provided $165,000 to each project, principally to cover basic design and production expenses.

The Second Year

As the program moved into its second year in New Orleans and Providence, the level of Federal support remained approximately the same. The Trinity Square Repertory Company in Providence produced Julius Caesar, The Importance of Being Earnest, and Miller's adaptation of An Enemy of the People; in addition, the Trinity Square developed an in-school project called "The Rhode Show," an informal dramatic program which was toured to most of Rhode Island's high schools. In New Orleans, the Repertory Theatre presented The Crucible, A Midsummer Night's Dream, Saint Joan, and Tartuffe.

In late summer of 1967, Los Angeles was established as the third site for the Laboratory Theatre Program. The Los Angeles school system had been interested in establishing a Laboratory Theatre Project from the beginning, but it was not until mid-winter of '66-'67 that officials there were able to bring together all of the necessary components (including a high degree of financial support from local sources) to submit a viable base proposal under Title III.

The Los Angeles Project differed slightly from those under way in Rhode Island and New Orleans in that only 10th grade students, numbering approximately 34,000 attended each of the four major plays being produced for the schools by the Inner City Repertory Company during 1967-68. These four plays were Tartuffe, The Glass Menagerie, The Sea Gull, and A Midsummer Night's Dream. The same students were scheduled to attend the plays each year.

The Inner City Repertory Company was formed to produce the Laboratory Theatre plays, and provide other curriculum enrichment activities, under a subcontract with the Los Angeles Board of Education. The company was housed in facilities provided by the Inner City Cultural Center, Inc., a new nonprofit organization which agreed to serve as the host group for the Laboratory Theatre company. This organization obligated itself to raise locally the funds necessary to renovate and equip a new theatre on Vermont and Washington in downtown Los Angeles.

The amount of support from Federal sources for the Los Angeles project the first year included $165,000 from the National Endowment for the Arts in a grant made directly to the ICCC to cover production costs for the four Laboratory Theatre plays; and a total of $649,000 from the Office of Education in a grant to the Los Angeles schools, $473,000 of which came from Title III and $176,000 from Title IV of the Elementary and Secondary Education Act. Of the $649,000, an amount totaling $352,000 went to the

Inner City Cultural Center to cover operating expenses for the four productions; the remainder covered direct educational costs to the school system (i.e., administrative, bussing and curriculum development).

The Third Year

During the 1968-69 season, the Trinity Square Repertory Company mounted three plays for student audiences and, in addition, a new version of the "Rhode Show" which toured the schools. The first play was Red Roses for Me. The second was a Grotowski cum Adrian Hall rendition of Macbeth. This was followed by a cast-written improvisation upon Melville's Billy Budd, fitted to the redesigned auditorium that had been provided for the production of Macbeth.

In New Orleans, the season was Arms and the Man, Twelfth Night, a new version of An Enemy of the People, and, finally, a program of two Ionesco one act plays, "The Bald Soprano" and "The Chairs". An innovation during the season was a dramatized introduction to "absurd" drama that was organized by Shirley Trusty, the Project Supervisor, to tour the schools prior to the Ionesco bill.

In Los Angeles, the season consisted of A Raisin in the Sun, Our Town, Macbeth, and a rock version of The Fantasticks. Additional theatrical activities at the ICCC--visiting companies, special "nights," tryouts of new plays--supplemented the ICRC's productions for students, and the community was additionally involved in the ICCC's educational and apprenticeship programs.

The Fourth Year

An intensive and broadly-based campaign to "Save Project Discovery" was carried out in Rhode Island in early 1969, with the result that enough school committees throughout the state appropriated funds for continuing the Project that a majority of Rhode Island high school students continued to attend plays at Trinity Square as a regular part of their educational programs. At the behest of Governor Frank Licht, the state government provided $40,000 to cover administrative expenses, to provide for the continuation of in-school services, and to support the production of curriculum materials. Adrian Hall's company adventurously mounted a season of American plays that had never or rarely been staged previously, the only exception to this rule being Wilder's The Skin of Our Teeth. The new plays were Lowell's Old Glory, William Goyen's House of Breath, Roland Van Zandt's Woodrow Wilson in the Promise Land, and James Schevill's Lovecraft's Follies.

In New Orleans, although elaborate plans for a fourth season were announced, the company collapsed from lack of prospects for community support in the summer of 1969. Stuart Vaughan resigned, his assistant David Scanlan took another position, and the company dispersed. Despite this, Paddy Ryan, the company business manager, and other administrative

personnel, along with the theatre's board president, Mrs. Muriel Bultman Francis, persisted in their efforts to revive the theatre company.

Miss June Havoc agreed to take over as artistic director of the reconstituted company, and monied and influential people were involved in promoting the theatre. A new building, a desanctified nineteenth century synagogue, was purchased and converted into a small house--much more appropriate in terms of the potential audience than the old Civic theatre--with a thrust stage. In the late spring of 1970, the new Repertory Theatre, New Orleans opened its season with a gala premiere.

In Los Angeles, during the season, the productions for students were West Side Story, Room Service, and Anouilh's Antigone. In addition, a production of "The Bald Soprano" toured the schools.

Introduction

There is an unwritten rule of the research trade that one must give his reader the impression that the study being reported moved smoothly, step by step, from hypothesis formation through design and execution and data analysis to interpretation. A persona must be created who speaks in the third person omniscient, who is cool and impeccably unflappable, who never fails to anticipate all contingencies with 100% accuracy and is never surprised by anything that happens, because everything always goes just as it was planned. The mask to be assumed by the writer of research reports is that of the pool hustler, who never has a hard shot except the first one, because he plans out the whole game and always gets perfect position. But doing research with people in institutions like schools is a lot more complicated than shooting pool, and the pose is not only a vain pretense, but a disservice to fledgling researchers who read reports, for when they watch their first perfectly ingenious study being thoroughly fouled up, they will be given to thinking dark thoughts about their own incompetencies, when in fact they have just had an experience that the professor who wrote the research textbook has had and will continue to have.

This prologue is for two reasons. First of all, it is an occasion for apologizing in advance for failing occasionally hereafter into the pose of omniscient objectivity, and to assure the reader that when we do we are lying. Second, it is an occasion for noting that this volume contains only a fraction of the empirical research done on the Educational Laboratory Theatre Project--that part which we think is printable.[1]

We have had second thoughts about many of the studies printed in earlier end-of-year reports and have not extended their lives by including them in this volume. Other studies that were carried out have never been written up--either because they were seriously deficient or because our data collection plans were irremediably scrambled up by accidents of various sorts. The best we can say about these studies that no one will ever read is that each of them made its contribution to improving the quality of subsequent investigations.

A Summary History of the Research Activities

Some historical background and some general remarks about the research problems presented by the Educational Laboratory Theatre Project may usefully precede the presentation of the empirical studies in this volume. Early in the development of the plans for the Project, it had been decided that a research and assessment component would be an integral part of the operation, and that this research activity would be conducted independently of the school systems in the Project sites and funded out of the Project budget.

The system of regional educational laboratories, of which CEMREL is one, was being established at the same time that the plans for the Theatre Project were being formulated. Dr. Wade Robinson, the Executive Director of CEMREL, had worked at the Office of Education, and was known by the principals in the planning of the Theatre Project to have a particular interest in literature as well as in research. Being in St. Louis, CEMREL was suitably outside the geographical area of the sites that had been selected for the Project. The idea of CEMREL's doing the assessment was proposed, and after extensive conversations between Dr. Robinson and Miss Kathryn Bloom, then Director of the Arts and Humanities Branch of the Bureau of Research, and their respective staffs, it was decided, on the one hand, that CEMREL would be capable of carrying out the research that was desired, and, on the other, that accepting the contract to conduct the research would be in CEMREL's interest. On September 19, 1966, in a letter to Miss Bloom, Dr. Robinson gave formal notification that

> After a full consideration of the difficulties involved in conducting a program of research and assessment on the Educational Laboratory Theatre Projects you have begun in Providence, Rhode Island, and New Orleans, Louisiana, the Executive Committee of our Board of Directors voted unanimously in favor of our complying with your request that we submit a general plan and budget for conducting the required work.

The work statement referred to had been developed after discussions with the Project leaders in Rhode Island and New Orleans. It emphasized that the research effort during the first year would be devoted primarily to (1) defining problems and gathering baseline data and (2) planning for "systematic and continuous research on the effects of the live theatre presentations." Then the work statement outlined the types of descriptive and analytical studies that would be conducted over the three years, and finally it contained suggestions about the

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*Throughout, "Project" (with a capital P) is used to refer to the Educational Laboratory Theatre Project itself; "project" with a small p may, as the context will make clear, refer to another program or undertaking. "Research component" refers to the CEMREL staff assigned to the assessment of the ELT Project.

sorts of empirical studies CEMREL might be able to conduct during the second and third years of the Project.

> For instance,...studies could be undertaken which focus on the relationship between the teacher and the curriculum and pupils' understanding of the theatre and dramatic presentation....A variety of drama curriculum "packages" could be constructed to be used by teachers prior to the students' observation of live theatre....

From the start, then, the research component was conceived of as having tasks beyond those of merely describing and evaluating the Project; the Project was, that is to say, to serve as the occasion for studies of teaching, learning, and perception in an area in which few empirical studies had previously been conducted.

It was December 1, 1966 before final approval of CEMREL's research plans and budget was given and the research component funded. The research component was to be funded in the amount of $75,000 per year per site throughout the three year life of the Project. The funds for the research component were to come from contributions made to the Project under Title IV, ESEA.

When, a year later, the Project in Los Angeles began operation, the level of funding for the research and assessment activities reached $225,000 per year, and this level of funding continued through the following year, 1968-69. When, during the 1969-70 academic year, only the Los Angeles Project was in operation, an additional grant of somewhat less than $40,000 was given CEMREL to support data reanalyses, continued oversight of the other two sites in the fourth year, and the preparation of the final report.

When, early in 1967, Dr. Howard Russell became CEMREL's Associate Director, he took charge of the Theatre Project assessment. CEMREL offices were immediately set up in Rhode Island and New Orleans. In New Orleans, Miss Lucille Cherbonnier, a retired administrator in the Jefferson Parish schools, was hired on a half-time basis as CEMREL's area coordinator, whose responsibility (among many others) it was to act as liaison between CEMREL and the various persons and institutions in New Orleans with whom we would have to deal. Somewhat later, Mrs. Charlotte von Breton, a Providence businesswoman, was hired to act in a similar capacity in Rhode Island, and, still later, Mr. Norman McLeod, the retired principal of North Hollywood High School, became CEMREL's Area Coordinator for Los Angeles.

Each of these people was intimately familiar with the local communities and with the policies and personnel of the local schools. Their knowledge and their good offices did a great deal to open doors to "outsiders" from St. Louis and from Washington, and immeasurably reduced the difficulties of monitoring and assessing the Projects from a distance of a thousand miles or more.

The first year of the research effort was moderately productive, considering that the Project had been in actual operation for several months before the research component was funded, and that a separate research staff for the ELT Project could not be recruited until the contract was signed in December, 1966. Dr. Robinson, Dr. Russell, Dr. Tom Johnson, and Mrs. Mary Louise Barksdale, Dr. Robinson's Administrative Assistant, along with the Area Coordinators, opened the necessary channels of communication. Miss Diane Wall and Mr. Richard Robb, who was to be the Project's programmer and resident mathematician throughout, gathered and analyzed great amounts of demographic and baseline data. And the first preliminary studies of reactions to the Project were undertaken.

In the spring of 1967, Dr. James Hoetker was added to the staff as Director of Curriculum Studies. He and Mr. Alan Engelsman, an English teacher on leave from Clayton, Missouri, High School, along with the Project administrators, a representative from the Office of Education, outside consultants, and representatives from the theatre companies, explored ways to identify curricular problems and ways of meeting the ongoing needs of teachers involved in the Project. The result was a summer workshop attended by ten English teachers from each of the project sites and followed by the development of curriculum materials which finally served an important part in a large-scale experimental study of the relationships between classroom study of drama and attendance at the theatre.[2]

At the start of the 1967-68 academic year, Dr. Fannie Handrick came to CEMREL from Harvard to serve as Director of the research on the Theatre Project.[3] During this second year, substantial progress was made, but some of it was by way of learning from our mistakes. On the positive side, the collection of documentary and questionnaire data was routinized, problems of access to informants in the schools were reduced or eliminated, instruments which were later to prove very useful were developed, and the first studies involving the manipulation of variables were undertaken. On the negative side, we spent too much time and effort on sampling problems before we had the means for gathering data from which we could generalize, we borrowed or developed and used instruments we later decided were inappropriate, we met resistance from the actors to certain instruments (such as the semantic differential) and watched whole studies self-destruct because we had not properly prepared the subjects to cooperate.

During the summer of 1968, the planning for the large experimental study, to be conducted in Rhode Island, was completed and the study, which covered some six months, began in September. At that time, Dr. Handrick left for another position, and both Alan Engelsman and Dr. Brian Hansen joined the staff on a full time basis. It was decided that, rather than appointing a Director, a system would be tried in which a different investigator took primary responsibility for each

of the three sites--Hoetker for Rhode Island, Engelsman for New Orleans, and Hansen for Los Angeles. This system worked extremely well, especially in that, by concentrating on a single site, each investigator became intimately familiar with the workings of a particular Project. The 1968-69 year was extremely productive from the research point of view, and the Rhode Island and New Orleans studies reprinted in this volume were, for the most part, done during this period. By this time we had a pretty firm understanding of what we could and could not do, we had learned the most expeditious ways of doing what we could, and the amount of usable data gathered per dollar expended increased many-fold over the preceding years.

During the final year of the Project's existence, 1969-70, Hoetker became Research Director, and Mrs. Nancy Schanbacher joined the staff as a technical writer. We confined ourselves to a monitoring operation in Rhode Island and New Orleans, reduced our staff, and concentrated our efforts on understanding the unique features of the Los Angeles Project, those having to do with the multiethnic makeup and the social-change objectives of the Inner City Cultural Center, the producing agent for the Project plays. In addition to the data-gathering activities that had been routinized in all three sites, we sent two staff members, Misses Phyllis Hubbell and Melba Englander, to take up residence in Los Angeles for the purpose of writing a "history" of the ICCC, and we undertook a series of empirical studies of students' responses to the interracial dimension of the ICCC plays.

Some Remarks on the Research Problems Presented by the Educational Laboratory Theatre Project

Only three aspects of the research will be considered in this section; a more complete and systematic consideration of the whole program, with an emphasis upon the implications of our experiences for other researchers in the arts, is still to be written. We will comment briefly on (1) the restrictions imposed upon our efforts by the structure of the Project itself, (2) the restrictions placed upon our research efforts by the existing state of the art, and (3) the sorts of research we actually did as compared with what we might have done, or that might be done in future programs.

It has already been noted that the Project went into operation in Rhode Island and New Orleans in September, 1966, while the contract for the research component was not granted until December of that year. This meant, at the start, that there was no opportunity to get measures of student, educator, actor, or community attitudes or opinions prior to the initiation of the Project. Because of this, there was never the possibility of directly answering the question of how the state of affairs in regard to <u>anything</u> differed at the end of the Project from what it was before the beginning of the Project. Further, the lack of any lead time, prior to the opening of the Project, meant that we were trying to locate and devise research instruments at the same time as we were obliged to be gathering data and interpreting it. Still further, the Project was set up in such a way that all students in an

area were involved, so that there was never the possibility of making comparisons between students from a particular environment who participated in the Project and students from the same environment who did not participate. The calling in of a research specialist during the planning stages of the Project, and the granting of the research contract well before the actual inception of the Project, would clearly have made the situation much more researchable.

The need for lead time is related to the second aspect of the research problem. Almost nothing is known about measuring the sorts of changes and learnings that were foremost in the concerns of the planners of the Theatre Project. The devising of research strategies and appropriate data-gathering procedures is a long and demanding task. At the beginning of this Project, as we were trying to devise appropriate strategies for answering the questions we felt were really of basic importance, we had no choice but to fall back on the familiar technology of attitude measurement and on the (we now feel) completely inappropriate dogmas of program evaluation and standardized testing. Even a single year of lead time would have yielded a considerable increase in the amount of knowledge gained from the research on the Educational Laboratory Theatre Project (or any similar Project).

To turn to the third aspect of the research effort, let us consider the sorts of research that might have been done and which actually were done, and make comments or recommendations as required.

First, the research might have been designed to establish the extent to which the particular Project did or did not accomplish the objectives which had been set for it. This sort of evaluative research has received a great deal of emphasis lately, and the most sophisticated sorts of theories and techniques have been developed for doing such evaluations. It was not always well understood in all quarters, but it was never CEMREL's intention nor the intention of the sponsors of the Project simply to "evaluate" the Project. In the first place, only the process objectives of the Project--that plays would be presented to students, that regional theatres would be assisted--were ever really clear. There were as many terminal objectives as there were people who were asked about them. To single out one or two--or a hundred--terminal objectives and to concentrate on estimating the extent to which they were accomplished would have been wrongheaded for two reasons. First of all, such a codification of objectives would have misrepresented the very nature of the Project, which was in the best sense of the word an experiment, in which the questions of real importance were open-ended ones on the order of "What will happen if...?" rather than closed ones on the order of "Does this happen?"

Second, the objectives of primary importance to the sponsors of the Project and to the CEMREL staff were precisely those which no one knows very well how to objectify or to measure easily. To have insisted on a conventional evaluation would have meant restricting ourselves to the measuring of the attainment of those objectives which could be objectively measured but which no one really cared about.

A second alternative for the research component would have been to concentrate on gathering information and formulating programs which would strengthen the artistic component of the Project--the resident theatre companies, in this case. Such a research effort, of course, would call for a different sort of staffing that the one that was actually undertaken--the CEMREL staff was composed largely of educators, who were most interested in and familiar with educational problems, and it is safe to say that the work we did was of little help to the resident companies and of little interest to them. (An exception to this was a small community survey in New Orleans, which we subcontracted for at the request of the resident company.) Certainly, the resident companies might have been better served by research which concentrated on describing the potential market and on devising ways to develop it. And we would recommend that funding agencies in the future give consideration to such developmental research as a perfectly legitimate part of any scientific research component attached to an educational program in the arts.

A third possibility would have been to institute the research component as a self-correcting mechanism within each Project. The emphasis here would be upon the Project as an open and flexible arrangement to be reshaped and revised constantly on the basis of information gathered by the researchers. Our research, we feel, had little of this sort of function. The Project, first of all, was governed in its arrangements by contracts and legislation, so that large changes could not have been made quickly in any case. Then, also, the very sorts of studies we undertook and our reporting procedures (our yearly reports were submitted at about the time contracts were signed) guaranteed that (1) there would be a considerable time between the gathering of data and the reporting on it and (2) there would be no opportunity to act upon our reports for at least a year. We would recommend that more emphasis needs to be given to the sort of research designed to provide immediate feedback to program participants and to designing institutional frameworks which would allow (or compel) program managers to act upon the findings of such research. This sort of research, it might be noted, as well as the developmental research discussed immediately above, may be, if well done and carefully analyzed, as valuable scientifically and to the professions as any other sort of empirical research.

A fourth alternative sort of research, to turn to the kinds that we actually did, might be called historical or descriptive or analytical or all those things. It involves the getting and keeping and making sense out of the facts; it involves background reading, the gathering of documents, the making of observations, the holding of interviews, the administering of questionnaires. Then you put all the evidence together, talk it over, and try to make sense out of it. This is a familiar and necessary sort of work, and it constitutes the "assessment" portion of our "research and assessment" that is reported in these volumes.

And, finally, there is the empirical research proper, with which this volume is concerned. In our particular case, the specific studies we undertook (out of the much larger number we considered undertaking) grew directly out of our analyses of the historical data we gathered, and the historical data provided us not only with important researchable questions, but with hypotheses, hunches, items for instruments, procedural protocols, contexts for the interpretation of results, and the names of people to turn to for assistance. The studies we undertook bore three sorts of relationships to the Project. Some--and the studies of responses to interracial theatre in Los Angeles are the best example of the first sort of relationship--sought directly to put to the test propositions about what specific effects the Project would have on students. The second sort--the studies of audience responses in New Orleans are good examples of these--sought to evaluate theories held by parties to the Project or to determine who was in the right in important disputes which affected the operation of the Project. The third sort--such as the "Place of Drama" studies--were investigations of questions we ourselves had raised on the basis of our own observations of the Project.

A study such as the experimental investigation of drama teaching that was conducted in Rhode Island bore all three sorts of relationship to the Project--it evaluated commonly held objectives for the Project, it mediated a dispute about teaching methods between the educators and the actors, and it dealt with basic matters of padagogy and response to drama that were of general importance beyond the Project itself. We would recommend that, in designing the research components of future programs, more attention be given to this third sort of relationship, in which the Project serves primarily as an opportunity for fundamental studies which it would be difficult or impossible to conduct outside of the organizational structure provided by the project itself.

Our own work, to try to summarize, was not as productive as it would have been if a research-oriented person had helped to design the Theatre Project itself, or as it would have if sufficient time had been allowed prior to the Project to plan and outfit the research program. The work we did was of little assistance to the resident companies except, perhaps, insofar as their work has been publicized in reports on the Project. And our work had much less effect than we would have wished upon the ongoing conduct of the Projects themselves. On the other hand, although we cannot claim to have solved many of the vexatious problems involved in doing research on aesthetic and affective phenomena, what we did was much more worthwhile than the sort of program evaluation that is currently being demanded (the channel-visioned assessment of the attainment of predetermined objectives). The histories and the volumes of documentation we have produced, we hope, will contribute to perhaps a dozen masters theses, a dissertation or two, and maybe eventually a full-blown critical history of the Project. The empirical studies we have done, we hope, raise questions that others will pursue, and provide assistance to investigators subsequent to us in such areas as instrumentation, strategies, and designs.

The comments and criticisms that we have ventured on the basis of our interpretations of the evidence will, we further hope, allow planners, and administrators of, and participants in, future programs to avoid the many errors made in the course of the Theatre Project while enabling them to emulate its many admirable accomplishments.

Notes on the Studies Included in This Volume

Some of the studies we set out to do were aborted--by the refusal of the actors to cooperate, in one case, by student riots in another; some of the studies were curtailed by circumstances beyond our control--the Los Angeles teachers' strike, for example. Still others were just flops--due to instruments that did not discriminate or unforeseen factors which contributed such large errors that results could not be interpreted.

These stillborn studies were valuable primarily as part of our own educations, and they form part of the written record of the research on the Theatre Project only in inconspicuous footnotes. The studies reproduced here, and in the companion volumes, are those that we think have enough value to reprint, as contributions to an understanding of the Theatre Project or as contributions to the educational research literature.

They range widely in method and rigor, from analyses of questionnaire data through informal, almost ad hoc, studies of particular segments of the Project, to full-blown multivariate factorial experiments.

FOOTNOTES

[1] The report of a major questionnaire study, which might have been included in this volume, instead forms the second chapter of the "Reactions" volume.

[2] The development of these curriculum materials was one of the major accomplishments of CEMREL's research on the Educational Laboratory Theatre Project. They were intended to provide teachers without training in drama with ways of dealing with dramatic activities in the classroom, it having been established as the consensus of the experts with whom we consulted that only through the medium of such activities could students be given a real understanding of the relationships between the script of a play and a production of it. In addition, the materials were intended to substitute for in-service training of teachers in drama, the number of teachers involved in the Project making conventional in-service training economically and logistically impractical.

Beginning in September, 1967, the materials were field tested in all sorts of schools, with all sorts of teachers and students, in the three sites, in St. Louis area schools, and in other areas. Great masses of reactions and criticisms were obtained from teachers and from students and many lessons were taped or videotaped. On the basis of the data gathered in the field tests, the materials were thoroughly revised, field-tested again, and revised again, with the final CEMREL-published version of the three volumes--collectively entitled An Introduction to Theatre--being completed early in 1970.

As they exist, the materials do (we are convinced) achieve both the objectives for which they were intended--they teach students to read and to understand plays and they teach teachers how to conduct goal-directed dramatic activities in the classroom. Each of our previous end-of-year reports contains a section recounting the progress made during the year in the development of these materials, but there is little point in reprinting those sections at this time. Perhaps the only datum that need to be reported is that a follow-up study of teachers who had used the materials in experimental try-outs established that almost all teachers continued to use the materials and that many had influenced their colleagues to begin to use them.

The Introduction to Theatre materials have been widely publicized at professional meetings, used by teachers all over the country who have purchased copies of them, and they are now being further developed for commercial distribution.

Pending commercial publication, the third volume of the set is out of print, but copies of the first two volumes may be obtained by writing to Mrs. Verna Smith, CEMREL's Public Information Officer, at the address on the title page of this report.

[3] In addition to the persons named in the text, valuable contributions were made by Mr. Gary Siegel and Mr. Saul Hopper, who served at various times as data analysts, writers, library researchers, and general men-of-all work. At other times, Miss Beverly Schneider and Mr. David Handscher served as research assistants. We were also blessed with a series of skilled and decorative secretaries, who, as everyone knows, are the ones who really keep an operation like ours running: Mrs. Debbie Duke, Mrs. Pat Simmons, Mrs. Mary Kunstmann, Mrs. Jeri Emahiser, Miss Nancy McDonough, and Miss Linda Taylor.

PART ONE

Some Miscellaneous Brief Studies

PREFACE TO THE REPORTS OF SOME MISCELLANEOUS STUDIES

There always seems to be a tip of a necktie or the toe of a sock sticking out of the trunk after it is all packed and locked. This section contains our necktie tips and sock toes--brief reports of interesting informal studies that really do not quite fit anywhere else. The first consists of a report of teacher and student responses to a number of questionnaire items of sorts different from those discussed in the first chapter of the "Reactions" volume. The second is a summary report on the Alumni Clubs and an analysis of the characteristics of students who took advantage of the reduced admission prices offered by the Trinity Square Repertory Company and Repertory Theatre, New Orleans to holders of Alumni Club cards. The third consists of a few critical remarks about the special curriculum materials prepared for teachers taking part in the Project and a report of some data about how the materials were used and the plays taught.

Reports or summaries of other empirical investigations which we have not seen fit to print in full in this volume are to be found in footnotes at various places in these volumes or in the chapters in the "Reactions" volume devoted to the reporting of responses to the Project in the site where the investigations were carried out.

THE END-OF-THE-PROJECT QUESTIONNAIRE:

ADDITIONAL ANALYSES

James Hoetker

Comparisons between sites and between groups of respondents in their judgements of various aspects of the Project are reported in Chapter 2 of the "Reactions and Assessments" volume of this report, and information on sampling procedures and copies of the questionnaires may be found in that place. The student and teacher questionnaires contained a number of other items that were asked more for reports and opinions than for judgements on the Project. These items are reported on in the present chapter and in the following one on curriculum materials.

One of these items on the teacher questionnaire asked, "What type of students do you think usually enjoyed the plays most?" Two responses were required, the first identifying the ability level that enjoyed the plays most, the second identifying the sex that enjoyed the plays most. In all three sites, about 40% of the teachers thought that "brighter students" most enjoyed them most, and from 17% (in Los Angeles) to 33% (in Rhode Island) estimated that all ability levels enjoyed the plays equally. Almost no one in any of the sites thought that "slower students" had enjoyed the plays most.

In all three sites, about 40% of the teachers said that the girls enjoyed the plays more than boys, and about 60% said that there was no difference between the sexes in enjoyment. Practically no one thought that the boys enjoyed the plays more.

Another item asked, "What type of student do you think benefitted most from the experience of attending the theatre?" "Benefitted" was not defined, and it probably was taken by most teachers to mean something on the order of "changed in a desirable manner." Table 1 summarizes the responses to these items.

Insert Table 1 Here

There was no clear agreement among teachers about which ability level of students benefitted most, but it is notable that in all three sites the largest percentage of teachers said that the "average students" got the most benefit from the Project. The teachers made a distinction between "enjoying plays" and "benefitting from plays," and probably the reasoning was that the bright students were best equipped to understand and appreciate drama ("enjoy" it), but that they did not need--in educational terms--what the drama had to give them as much as did the "average" and "slower" students.

TABLE 1. Percentages of Teachers Judging Different Categories of Students to Have Benefited Most from the Project

Classification of Students	% Judged to Benefit Most		
	Rhode Island	New Orleans	Los Angeles
By Ability			
Brighter Students	18.6	19.1	31.4
Average Students	39.5	36.2	37.1
Slower Students	23.3	10.6	5.7
No Difference	18.6	34.0	20.0
By Sex			
Girls	5.3	29.7	17.1
Boys	21.1	8.1	14.3
No Difference	73.7	62.2	65.7

Note that the teachers in Rhode Island judged the "slower" students to benefit most twice as often as did the New Orleans teachers and four times as often as did the Los Angeles teachers. Our guess would be that the style and pace of Adrian's Hall's productions, which were likely to catch the attention of non-academic students by their sheer physical impact, help to explain this difference. And the same factor may be introduced to explain the fact that only in Rhode Island did more teachers judge that boys benefitted more from the Project than did girls. But the most notable finding, perhaps, is that the large majority of the teachers in all sites thought that boys and girls benefitted equally from the Project.

On each teacher and student questionnaire was a list of all of the plays that had been presented as part of the Project in the particular site in which the questionnaire was administered. Students were asked to indicate which plays they had seen, which play they liked best, which play they liked least, and which they would "probably remember best ten years from now." The teachers were asked to indicate which plays they had seen, which one they had liked best, and which one they judged their own students to have liked best.

The responses to these items shed some light on the problem of play selection in a Project such as this, and suggest that, while teacher and student tastes in plays may differ, teachers are very accurate in their perceptions of what students like.

Tables 2, 3, and 4, give the percentages of students and teachers in each site who chose each play as their favorite. Since many of those who responded to the questionnaire would not have seen the plays presented during the first and second years of the Project, so that third year plays would inevitably receive the most nominations, the tables also give the percentages of respondents who had seen a particular play who chose it as their favorite. Tables 5, 6, and 7 give the same information about the plays the students liked least.

Insert Tables 2 through 7 Here

Taking the responses by sites first, and considering only the nominations by students and teachers who had seen the plays in question, we can make the following observations. In Rhode Island, Billy Budd and Macbeth were the productions most-liked by students, but they both also received a large number of student nominations as least-liked. Macbeth and Billy Budd marked a turning point in Trinity Square's approach to its productions. Discarding the proscenium stage and bringing the set and the action into the audience (or vice versa), Hall and his designers gave the students a taste of "Total Theatre" in these two pro-

TABLE 2. Percentages of Rhode Island Students and Teachers choosing Each Play as Best-Liked

Title of Play	Best-Liked Play (% of All)		Best-Liked Play (% of Those Seeing It)	
	Students	Teachers	Students	Teachers
SAINT JOAN	2.0	7.5	6.1	10.3
AH, WILDERNESS!	6.9	10.0	21.4	16.0
MIDSUMMER NIGHT'S DREAM	3.6	0	10.2	0
THREE SISTERS	0.3	7.5	1.6	13.6
JULIUS CAESAR	8.2	7.5	10.8	8.6
IMPORTANCE OF BEING EARNEST	14.5	7.5	22.5	9.4
ENEMY OF THE PEOPLE	11.5	30.0	19.6	37.5
RED ROSES FOR ME	6.9	2.5	10.8	3.6
MACBETH	21.7	10.0	27.8	11.4
BILLY BUDD	24.1	17.5	33.8	21.9

TABLE 3. Percentages of New Orleans Students and Teachers Choosing Each Play as Best-Liked

Title of Play	Best-Liked Play (% of All)		Best-Liked Play (% of Those Seeing It)	
	Students	Teachers	Students	Teachers
CHARLEY'S AUNT	16.2	4.5	54.0	6.9
ROMEO & JULIET	3.7	9.1	10.8	12.9
OUR TOWN	4.2	18.2	13.2	26.7
THE RIVALS	0.4	2.3	1.6	3.8
MIDSUMMER NIGHT'S DREAM	7.6	13.6	12.8	15.8
SAINT JOAN	4.2	2.3	7.0	2.9
TARTUFFE	8.3	2.3	13.4	2.9
ARMS & THE MAN	31.6	13.6	34.2	14.6
TWELFTH NIGHT	5.2	9.1	5.9	10.8
ENEMY OF THE PEOPLE	5.2	2.3	6.2	2.7
Ionesco One-Acts	4.9	4.5	11.7	8.3

TABLE 4. Percentages of Los Angeles Students and Teachers Choosing Each Play as Best-Liked

Title of Play	Best-Liked Play (% of All)		Best-Liked Play (% of Those Seeing It)	
	Students	Teachers	Students	Teachers
TARTUFFE	4.5	2.8	9.2	8.3
SEA GULL	1.8	8.6	3.1	20.0
GLASS MENAGERIE	7.5	5.7	12.5	16.7
MIDSUMMER NIGHT'S DREAM	12.0	8.6	20.5	25.0
RAISIN IN THE SUN	19.0	2.8	28.3	6.3
OUR TOWN	6.1	8.6	9.7	21.4
MACBETH	1.5	0	2.8	0
FANTASTICKS	14.1	17.1	28.4	42.9
WEST SIDE STORY	22.0	17.1	42.6	25.0
ROOM SERVICE	5.4	2.8	14.1	5.3
ANTIGONE	5.5	5.7	8.1	9.1
Bald Soprano	0.6	2.8	18.2	20.0

TABLE 5. Percentages of Rhode Island

Students Choosing Each Play as Least-Liked

Title of Play	Least Liked (% of All)	Least-Liked (% of Those Seeing It)
SAINT JOAN	6.7	20.4
AH, WILDERNESS!	3.1	9.0
MIDSUMMER NIGHT'S DREAM	6.0	16.5
THREE SISTERS	8.0	34.6
JULIUS CAESAR	16.5	20.0
IMPORTANCE OF BEING EARNEST	7.7	11.2
ENEMY OF THE PEOPLE	7.4	11.6
RED ROSES FOR ME	18.1	26.5
MACBETH	14.2	17.1
BILLY BUDD	11.5	16.9

TABLE 6. Percentages of New Orleans

Students Choosing Each Play as Least-Liked

Title of Play	Least-Liked (% of All)	Least-Liked (% of Those Seeing It)
CHARLEY'S AUNT	0.3	0.9
ROMEO & JULIET	2.4	7.0
OUR TOWN	3.3	10.0
THE RIVALS	3.4	11.7
THE CRUCIBLE	4.0	6.4
MIDSUMMER NIGHT'S DREAM	6.9	11.4
SAINT JOAN	11.7	19.4
TARTUFFE	4.6	7.2
ARMS & THE MAN	3.5	3.8
TWELFTH NIGHT	20.0	22.5
ENEMY OF THE PEOPLE	21.3	25.2
Ionesco One-Acts	18.8	43.9

TABLE 7. Percentages of Los Angeles

Students Choosing Each Play as Least-Liked

Title of Play	Least-Liked (% of All)	Least-Liked (% of Those Seeing It)
TARTUFFE	7.7	15.9
SEA GULL	16.9	28.0
GLASS MENAGERIE	4.1	6.7
MIDSUMMER NIGHT'S DREAM	4.9	8.1
RAISIN IN THE SUN	2.7	4.0
OUR TOWN	8.4	12.9
MACBETH	19.1	34.7
FANTASTICKS	2.4	4.6
WEST SIDE STORY	0.9	1.8
ROOM SERVICE	8.0	20.8
ANTIGONE	24.0	34.5
Bald Soprano	0.6	20.0

ductions, and reactions both in favor of and against the innovations were strong. Teachers apparently had some reservations about the stylized and athletic treatment of Macbeth, but Billy Budd received the second largest number of teacher nominations as best-liked.

Among Rhode Island students, Three Sisters and Red Roses for Me, Julius Caesar and Saint Joan were most often nominated as least-liked. Of these, Saint Joan and Three Sisters were chosen by more than 10% of the teachers seeing them as most-liked.

The play most liked by Rhode Island teachers was An Enemy of the People (in Arthur Miller's version), and the preference of teachers for such "problem" plays was demonstrated in the other sites as well, as will be seen.

In New Orleans, the antique farce Charley's Aunt was chosen as most-liked by a majority of the students who saw it, but the teachers rarely chose Charley's Aunt as most-liked. Our Town, Midsummer Night's Dream, and Arms and The Man--familiar, teachable plays--got the largest percentages of teachers votes.

In Los Angeles, West Side Story, The Fantasticks and A Raisin in The Sun all got more than 25% of the nominations for best-liked play from the students who saw them. Macbeth, Antigone, and The Sea Gull got the largest percentages of student votes as least-liked plays. West Side Story, The Fantasticks, and A Midsummer Night's Dream were most liked by teachers. Macbeth, which got the largest percentage of least-liked nominations from students, got no best-liked nominations at all from teachers.

It is interesting to compare teacher and student responses to plays that were performed in more than one of the sites. Only A Midsummer Night's Dream was done in all three places. In Rhode Island, few students and no teachers liked it best of the plays, and 16.5% of students liked it least. In New Orleans, 12.8% of students and 15.8% of teachers voted it best-liked and 11.4% of students liked it least. In Los Angeles, A Midsummer Night's Dream was one of the best-liked plays among both students (20.5%) and teachers (25.0%).

Tartuffe was done in Los Angeles--in a controversial production that caused the parochial schools to withdraw temporarily from the Project--and in New Orleans--where almost no one objected, although the audiences were predominantly Catholic. The Los Angeles Tartuffe was best-liked by 9.2% of the students and least-liked by 15.9% of them; 8.3% of teachers liked it best. The New Orleans Tartuffe was best-liked and most-disliked, respectively, by 13.4% and 7.2% of the students; only 2.9% of the teachers liked it most.

Saint Joan was done in both Rhode Island and New Orleans. In both sites, it ranked near the bottom in most-liked nominations and near the top in students' least-liked nominations. Our Town in New Orleans was the play most liked by teachers, while Our Town was fourth among the plays in popularity with Los Angeles teachers. Students in both sites were much less enthusiastic about the play.

in both sites were much less enthusiastic about the play.

"The Bald Soprano" was done in New Orleans as part of a two-play bill (with "The Chairs") in the theatre, while in Los Angeles the play was toured in the schools.

The Ionesco bill topped the student's list of least-liked plays in New Orleans. In Los Angeles, on the contrary, the touring "Bald Soprano" was rated as most-liked by almost 20% of both teachers and students. ("The Bald Soprano" was reported to have been one of the best shows put on by the Inner City group, and its good reception may be compared to the Rhode Island "Rhode Shows," which were pale by comparison to the in-theatre productions, and which drew fewer than 0.3% of the best-liked votes.)

An Enemy of the People was done in Miller's version in Rhode Island, where it was the play most liked by teachers, and in David Scanlan's new translation in New Orleans, where almost no one liked it, but many students nominated it for least-liked. Even more striking is the comparison between Rhode Island's Macbeth, which was best-liked by 27.8% of students and 11.4% of teachers and Los Angeles' Macbeth which was best-liked by 2.8% of students and by none of the teachers, while 34.7% of students said it was the play they most disliked.

The point seems to be, that for all the debate and dispute about play selection, the quality and the style of the production is at least as important as the play's title in determining how teachers and students will receive the play.

Rank-order correlations were computed for teacher and student lists of "most liked" plays in all three sites; the correlations were .65 in Rhode Island, .31 in New Orleans, and .57 in Los Angeles. Correlations between students' lists of the plays they liked best and teacher lists of plays they thought students liked best were, however, .83 in Rhode Island, .75 in New Orleans, and .82 in Los Angeles. The teachers, that is, tended to judge student tastes accurately rather than tending to project their own preferences onto students.

If any generalizations may be made about student and teacher preferences on the basis of the questionnaire responses, they would be on this order: No one liked badly done plays, and teacher and student judgments of artistic quality were very much in line with those made by expert observers and professional critics. Students most liked plays that were light (Charley's Aunt, Arms and The Man, Room Service), or "contemporary," either in theme or in production style (Fantasticks, West Side Story, Hall's Macbeth and Billy Budd). Students tended to dislike talky plays (St. Joan, Red Rose for Me) and/or static, conventional productions (Twelfth Night, The Rivals).

Teachers in all three sites clearly preferred "meaty," teachable plays which lent themselves to discussions of moral, social, and political issues (Antigone, The Crucible, An Enemy of the People). And, surprisingly since "A Shakespeare each Year" was initially planned to please the educators, they seldom chose a Shakespearean play as best-liked.

ALUMNI CLUBS

Alan Engelsman

The idea of issuing an Alumni Card to graduating seniors in 1968 originated at the Trinity Square Repertory Company in Rhode Island and was adopted shortly afterwards at the New Orleans Repertory Theatre, as well.[1] The card entitles the bearer to a special rate ($1.25 in Rhode Island, $1.50 in New Orleans) on two tickets for evening performances. The theatre companies wanted to make a good will gesture to the students who had been with the Educational Laboratory Theatre Project for two years, and by making the price of admission comparable to that of a movie show they also saw an opportunity to encourage students to continue their interest in live drama and become regular patrons.

Because the idea was not proposed until late in the spring, only a portion of the cards were distributed before the seniors graduated and there was no opportunity for the theatre companies to disseminate information about the coming season. However, most of the schools in each area cooperated by providing names and addresses of seniors and in the fall both brochures and alumni cards were sent out to the graduates.

It is obvious that this program is an excellent means for measuring the lasting effect of the Educational Laboratory Theatre Project on young theatre-goers, and CEMREL asked the theatres in both locations if they would keep a record, not only of how many alumni used their cards, but also of which alumni were attending. In Rhode Island the Trinity Square staff agreed to ask alumni to fill out an information form which we felt might give us a fuller insight about the types of people who were using this special admission card. A copy of the form is reproduced below.

PROJECT DISCOVERY ALUMNI CLUB

Date of performance you wish to attend_____

(Please fill out the spaces below) (Please leave these spaces blank)

Name:_____

Current Mailing Address_____Zip_____

ALUMNI NO._____

Permanent Address_____

ALUMNI TICKETS _____

High School you attended_____

Graduation Year_____

OTHER TICKETS_____

CURRENT OCCUPATION (Check appropriate line)

TOTAL_____

___full-time student ___full-time employee
___Part-time student ___part-time employee
___armed services ___housewife

SOLD OUT_____

MARITAL STATUS ___single ___married

In New Orleans the location of the ticket box office in a narrow mall in front of the theatre made it cumbersome for the box office personnel to handle any forms other than the tickets themselves. However, the alumni cards were numbered and the box office kept a record of alumni card numbers. In this way CEMREL's area representative was able to send follow-up letters to alumni who had used their cards.

Neither method of collecting the data was entirely successful. In Rhode Island the Alumni Club idea had been developed and promoted primarily by the public relations staff of the theatre company. Though the box office manager was apprised of the project, he was confronted with so many other more pressing problems that the form often did not get filled out. Later in the season there was a change in box office personnel and the purpose of the form was not immediately explained to the new staff. However, in the spring the company made a concerted effort to solicit and measure alumni interest. In early March they sent out an Alumni Club newsletter and during the run of the last two plays of the season they made an extra effort to have every alumni card user fill out a form. Though they are incomplete, our records for the entire season in Rhode Island are as follows:

TITLE OF PLAY	NO. OF ALUMNI PRESENTING THEIR CARD	TOTAL NO. OF TICKETS PURCHASED
Red Roses for Me	6	7
Brother to Dragons	20	23
Macbeth	27	38
The Homecoming	4	4*
Billy Budd	40	51
Exiles	18	27

* The box office staff was in a period of transition at this time and the account of alumni ticket purchases was sketchily recorded.

In New Orleans, though the box office staff was very cooperative, there were undoubtedly occasions when it was so rushed that it did not get an alumni card number from a ticket purchaser. Also, of 98 students whose numbers it did record, 20 failed to respond to CEMREL's follow-up letters and/or telephone calls. To further confuse our data in New Orleans, the theatre offered Saturday matinee tickets to Twelfth Night at $1.00 to all students and parents with students and there was a student "last minute" ticket available at every adult performance (1,480 were sold during the season) which cost the same amount as an alumni club ticket. Consequently, many alumni probably attended performances without showing their cards. However, the following list is a summary of the information we did obtain.

TITLE OF PLAY	NO. OF ALUMNI PRESENTING THEIR CARD	TOTAL NO. OF TICKETS PURCHASED
Arms and the Man	43	73
Twelfth Night	35	53
Enemy of the People	21	34
The Bald Soprano and The Chairs	23	47
Private Lives	17	42

Clearly, our records are too fragmentary to allow for any valid generalizations about the effect of the Educational Laboratory Theatre Project on the theatre-going habits of recent high school graduates. However, from the information we did collect we can offer the following statistics:

In Rhode Island...1968-69

99 alumni filled out forms and one season subscriber wrote a letter
15 of these individuals attended more than one play (11 girls and one boy)
3 attended more than two plays during the season
71 of the 99 (71.7%) are full time students
Approximately 68% of the alumni are girls
Approximately 28% of the alumni graduated from high SES schools[2]
Approximately 37% of the alumni graduated from medium SES schools
Approximately 35% of the alumni graduated from low SES schools

In New Orleans...

78 alumni responded to our inquiries
23 of these individuals attended more than one play (17 girls and six boys)
8 attended more than two plays during the season. Two saw all five productions; one of them had a season subscription
64 of the 78 (84.6%) are full time students
Approximately 65% of the alumni are girls
Approximately 37% of the alumni graduated from high SES schools
Approximately 41% of the alumni graduated from medium SES schools
Approximately 22% of the alumni graduated from low SES schools

In New Orleans there was no second year for alumni but in Providence Trinity Square continued to honor the alumni card during the 1969-70 season. Though similar cards had not been issued to 1969 graduates, a few who properly identified themselves were also given the alumni rate. But for the most part our records represent a continuing tally of youngsters who had been participants in Project Discovery during its first two years of operation and had graduated in June 1968.

A total of 110 alumni presented their cards at the box office during the 1969-70 season; 95 were using their card for the first time whereas 15 had used it the previous season. Of the 110 a total of 23 saw

more than one of the five productions and 15 saw more than two. The following list is a record of alumni attendance at each play:

TITLE OF PLAY	NO. OF ALUMNI PRESENTING THEIR CARD	TOTAL NO. OF TICKETS PURCHASED
The Old Glory	2	4
House of Breath	10	20
Woodrow Wilson in the Promise Land	25	56
The Skin of our Teeth	50	105
Lovecraft's Follies	53	106

Though the numbers we are dealing with are still disappointingly small, a few interesting trends may be noted. Theatre going for the Rhode Island alumni seems to be a more popular activity in the spring than it is in the fall. There also seems to be a spurt of attendance at the end of January. This is the time of many college semester breaks or to the fact that the plays presented at this time (Macbeth in 1969 and The Skin of Our Teeth in 1970) were familiar plays that were also box office successes and received good word-of-mouth advertising.

During the 1969-70 season when a more accurate record was kept of the total number of tickets purchased, the indications are that most of the alumni came to the theatre with at least one companion, and two or three either came back to see a show for a second time or loaned their card to a friend. According to our records one student attended Lovecraft's Follies on a Thursday night with three of his classmates and their companions, and he came back the next night with two more classmates. There are other indications in our records that word-of-mouth publicity from one classmate to another is one of the things that made Lovecraft's Follies the play alumni attended most.

A summary of the characteristics of the 194 alumni who presented their cards at the Trinity Square box office over the two year period is given below:

Approximately 81% are full time students
Approximately 60% are girls
Approximately 32% graduated from high SES schools
Approximately 36% graduated from medium SES schools
Approximately 32% graduated from low SES schools

Of the 45 alumni who have attended two or more plays during the two seasons:

Approximately 38% graduated from high SES schools
Approximately 27% graduated from medium SES schools
Approximately 35% graduated from low SES schools

We are still not working with large enough numbers of alumni for any of these figures to be of great consequence. What we do have available, though, is a list of names which a researcher some years from now could use to learn more about those who initially exhibited a continuing interest in theatre. A survey of this sort might provide useful information to repertory theatres about building audiences and to educators about the lasting effect of programs like the Educational Laboratory Theatre Project.

FOOTNOTES

[1]Toward the end of the 1969-70 season, an Alumni Club was being organized in Los Angeles as well.

[2]The socio-economic status (SES) of each school both in Rhode Island and in New Orleans was determined from information provided by the school principals about the occupations and average family incomes of parents. One third of the total number of schools in each site were assigned to the category "High SES," another third were designated "Medium SES," and the final third, "Low SES."

THE CURRICULUM PORTFOLIOS AND TEACHERS' USES OF THEM

James Hoetker

We had intended to include in our final report on the Educational Laboratory Theatre Project a critical evaluation of the curriculum packets or portfolios that were prepared in each site for use by teachers of English and related subjects. Writing a packet by packet and site by site evaluation of the portfolios, however, did not seem to be very worthwhile after we had gotten down to it and read our first drafts. So we decided it would be just as valuable to content ourselves with combining a few general observations about the curriculum materials with a report of data we have collected about how teachers valued the materials and actually used them.

The first observations that should be made about the materials is that, although they ranged from the truly excellent to the pedagogically goshawful, they were appreciated by the teachers, widely used, and were undoubtedly an important factor in encouraging educator acceptance of the Project. At their best--for instance, the Romeo and Juliet portfolio that was prepared in New Orleans by David Scanlan and Shirley Trusty--the materials provided to the teachers were better than anything available from a commercial publisher-in scholarship, richness, practical usefulness, and good taste. At their worst--and we won't nominate an example--they were without form or coherence, completely unrelated to the production that students were to see, and padded with dull garbage borrowed from workbooks and old lesson plans. There were more good ones than bad ones, though, in all sites and on all counts.

The greatest weakness of the portfolios generally, to the extent they were intended to help teachers to relate the plays to the curriculum, was that they were literary, as opposed to theatrical; conventional, rather than adventurous. The problem of how to introduce the theatrical dimension of the Theatre Project into the classroom was never really solved by the curriculum writers, although more attention was given to the attempt as the Project went on. (To be fair, no one else has solved the problem, either.) The portfolios prepared in Rhode Island by Richard Cumming and Rose Vallely probably were the most successful in doing justice to the relationships between the text of the play and the specific production of it that students were going to see. The devices used to do this included illustrated materials on stage design and lighting plans; transcripts of interviews with the

director, artists, and technicians; discussions of the way in which a text becomes a play on stage; and so on.[1] In New Orleans, Shirley Trusty took the effort to relate text and theatre outside the portfolios, emphasizing the in-service training of teachers in drama and improvisation, and placing upon the teachers the task of finding ways to link up the two aspects of the Project. Both approaches apparently worked better than do most things in education.

While the portfolios in Rhode Island and New Orleans were prepared jointly by a theatre person and an educator, in Los Angeles the resident company had no role in the preparation of the curriculum portfolios, and that responsibility was given to Mr. Bill Gass, who served under the Project Coordinator, Dr. Georg Stern. Mr. Gass established the practice of drawing upon the talents of local teachers of established excellence to assist him in the preparation of the portfolios. As a result, the portfolios prepared in Los Angeles were, on the one hand, more specifically concerned than the others with giving teachers practical assistance in teaching the plays (e.g., often there were separate study guides for different ability levels), and were, on the other, more remote from the theatre and (depending upon who was writing) more pedantic than the portfolios in the other sites ever became. (The lists of vocabulary words were especially hard to take.)[2]

Some idea of the importance of the portfolios may be gathered from reports of the distress that was conveyed by teachers on the few occasions when the portfolios were not delivered well in advance of the plays, and from the gradual waning of enthusiasm for the Project among Rhode Island teachers during its fourth year, when the portfolios were late or textless or sketchy (since three of the plays done by Trinity Square were new ones, with no scripts available).

Each year, one of our questionnaires that went to teachers asked a number of questions about the portfolios and how they were being used. The results from one year to the next were generally consistent, and what is reported here are the data obtained from teachers on the End-of-the-Project questionnaire, which was administered during the last months of the Project in each site. Complete information on the sampling procedures used in the obtaining of this information is given in the second chapter of the "Reactions" volume in this report and will not be repeated here.

In one item on the questionnaire teachers were given a list of the types of contents of a typical curriculum portfolio and asked to indicate whether each type of item listed had been found to be "highly useful" or "of little use." Table 1 summarizes the responses from the three sites.

Insert Table 1 Here

TABLE 1. Percentages of Teachers in Each Site Judging Each Type of Material as "Highly Useful"

Type of Item	Site		
	Rhode Island	New Orleans	Los Angeles
1. Critical Essays on Plays	50.0	40.4	57.2
2. Teacher's Study Guide	72.7	85.1	74.3
3. Historical Information and Background	52.3	53.2	54.3
4. Biographical Information on the Playwright	18.2	29.8	37.1
5. Maps, Pictures, and Bulletin Board Displays	45.5	53.2	34.3
6. Audiovisual Materials (Records, filmstrips, etc.)	13.6	21.3	28.6
7. Bibliographies and Lists of Additional Resources	6.8	12.8	2.8

The between-site differences in Table 1 are not striking, and there seems to be a general agreement among all the groups of teachers about the relative usefulness of the various types of materials. The figures do give the clear impression that the teachers most appreciated materials (study guides, displays, background and criticism) which helped them to handle the plays with a minimum of extra preparation, and that they had little use for those which called on them to do additional work (bibliographies) or presumably unfamiliar work (audio-visual materials). The one surprise--an encouraging one--is the relatively small percentage of teachers who found author biographies to be highly useful.

Since earlier questionnaires, on some of which we had asked teachers to rank order the materials by usefulness, had consistently established the script itself as the most highly valued piece of material, we had included on the End-of-the-Project questionnaire an item asking directly if the teacher would "agree that the text of the play itself is the most useful item for teachers?" In Rhode Island, 73% of the teachers agreed, in New Orleans, 57%, and in Los Angeles, 80%. These figures may be taken either as an indication of the teachers' confidence in their own ability to handle a play without elaborate assistance, or perhaps as an indication of the fact that the teachers (even at the end of the Project) considered the teaching of the text as their most important contribution to the Project.[3]

Another item asked which plays teachers had assigned students to read. There was considerable variation, between plays and between sites. In Rhode Island, the range was from 23% who assigned the reading of "Ah, Wilderness!" to 55% who assigned Macbeth. In New Orleans, the range was from 30% who assigned the reading of Ionesco's "Chairs" and "Bald Soprano" to 94% who assigned Twelfth Night. In Los Angeles, the range was 8.6% who assigned Tartuffe to 57.2% who assigned A Raisin in the Sun. On the average, 36.8% of Rhode Island teachers, 72.1% of New Orleans teachers, and 29.8% of Los Angeles teachers would assign the reading of any particular play. These variations are just about what could be predicted from knowledge of the amount of emphasis that was put upon using the curriculum portfolios to prepare students in each of the sites. This matter is discussed more fully in the first chapter of the "Reactions" volume, but it may be noted here that only in New Orleans was it laid down as official school policy that all English teachers would use the curriculum packets to teach each play prior to its performance.

This difference in emphasis--or in freedom of choice, if you will--that existed between the sites was also reflected in the answers to questions about how many class periods, on the average, were spent in study of a play before and after the performance of it. Table 2 summarizes the responses to these questions.

Insert Table 2 Here

TABLE 2. Percentages of Teachers in Each Site Who Reported Spending Particular Numbers of Class Periods Studying the Average Play

A. PERIODS SPENT PRIOR TO PERFORMANCE

Number of Periods	Percentage Reporting		
	Rhode Island	New Orleans	Los Angeles
One or less	36.4	6.4	28.6
2 or 3	43.2	48.9	45.7
4 or 5	20.5	29.8	20.0
6 or more	0	14.9	5.7

B. PERIODS SPENT FOLLOWING PERFORMANCE

Number of Periods	Percentage Reporting		
	Rhode Island	New Orleans	Los Angeles
One or less	59.1	70.2	74.3
2 or 3	40.9	27.7	25.7
4 or 5	0	2.1	0
6 or more	0	0	0

Despite the differences between sites, it is clear that the modal teacher spent three periods or less on the average play prior to the performance and one period or less on it following the performance. Since it would have taken several weeks to use all of the materials in even the thinnest of the curriculum portfolios that were provided to the teachers, it is clear that the teachers were highly selective in their usage of the portfolios. The best guess we can make from the data is that the teachers used the text and the "highly useful" supplementary materials to inform themselves about the play and then selectively conveyed this information to the students or used the information to structure a discussion of the play if the reading of it had been assigned.

Because of the prominence of the disputes about the appropriate methods of preparing students for the theatre (which disputes are examined in several of the studies reported later in this volume), we also asked teachers whether their "way of treating a play in the classroom changed as a result of the Theatre Project?" and whether their attitudes "toward the place of dramatic activities in the English classroom changed as a result of the Project?" The responses to these questions seem to have been directly related to teachers' attitudes toward the Project as a whole, as it was recorded in response to other questionnaire items. Of the Rhode Island teachers, who were the most favorable to the Project, 79.5% claimed that their teaching methods had changed "slightly" or "a great deal" as a result of the Project; of the New Orleans teachers, who had been somewhat less favorable toward the Project, 73.3% said their methods had changed; and of the Los Angeles teachers, who were least favorable, 65.7% said their methods had changed. Of Rhode Island teachers, 68.1% claimed their attitudes toward drama in the classroom had changed; of New Orleans teachers, 60.9% said the same; and of Los Angeles teachers, only 31.5% said their attitudes had changed. Regardless of these differences between sites, however, this is powerful testimony to the impact of the Project upon classroom practices; and, along with the inservice training programs and the excitement and example of the theatre itself, the curriculum materials must be considered as important agents in bringing about whatever changes did occur.

FOOTNOTES

[1] The portfolios in New Orleans eventually began to follow the Rhode Island example.

[2] Undoubtedly, the severest single criticism that could be made of the curriculum materials prepared in Los Angeles is that nowhere in them is there serious attention given to the multiethnic make-up of the Inner City Repertory Company, despite the fact that this interraciality was the central justification for the existence of the company and the ICCC itself. Certainly, the experiment in colorblind casting and its effects upon both the meaning and the quality of the productions was too educationally important to be so thoroughly ignored. Mr. Gass, the Los Angeles Curriculum Consultant, has written a long, thorough, and most interesting account of his curriculum development and inservice training activities which does much to explain why the Los Angeles curricula took the particular shape they did. This account is reprinted as Part Three of the third volume of this report, The Project Coordinator's Report on the Educational Laboratory Theatre Project in Los Angeles.

[3] A related question asked the teachers which of the plays that had been produced they had found most valuable from the standpoint of classroom instruction. The Rhode Island teachers most often chose two old standbys, Macbeth (36%) and Julius Caesar (15%); the New Orleans teachers chose two "issue" plays, The Crucible (30%) and An Enemy of the People (21%); the Los Angeles teachers chose three plays dealing with social or moral issues, A Raisin in the Sun (20%), West Side Story (14.3%), and Antigone (14.3%). Another item asked the teachers to choose the play that represented the "sort of play" that "has the greatest educational value." In this case, also, the plays dealing explicitly with social and moral issues were most chosen: An Enemy of the People in Rhode Island (48%); The Crucible (34%) and An Enemy of the People (22%) in New Orleans; A Raisin in the Sun (20%), Our Town (14.3%), and Antigone (11.4%) in Los Angeles. These choices may give some sort of insight into the way in which English teachers think of the process of teaching a play, and perhaps some clue as to what goes on in English classes. It also tends to confirm what is already well known, that educators and artists have quite different criteria for choosing and valuing plays to be performed in the context of an educational Project.

PART TWO

Studies of Relationships Between Classroom Instruction and Theatre Attendance

PREFACE TO THE REPORTS OF STUDIES OF RELATIONSHIPS BETWEEN CLASSROOM INSTRUCTION AND THEATRE ATTENDANCE

Four studies are reported in this section, and a fifth, too long to be reprinted here, is summarized. The studies have in common that they were concerned with how the educational system and the theatre interacted with one another. Questions about what the schools--and especially English teachers--should do to maximize student benefits from the theatre experience and questions about what the theatre companies should do (especially by way of play selection) to maximize educational gains from the Project were continually (and often heatedly) debated and pronounced upon throughout the Project. Each debater, typically, had only his personal experiences and the learned attitudes common to his profession upon which to base his case (but, of course, each maintained that his position was a logical deduction from the self-evident facts).

The first study reported in this section attempted to describe the ways in which educators, on the one hand, and theatre company members, on the other, differed in the objectives they held for the teaching of drama and the values they placed on the different objectives. The second study does the same for students, and compares students' objectives with those held by adults. Together, the studies give a picture of the differences between the various groups which helps one to understand the educator-artist conflicts that were a prominent feature of the Project.

The next three studies in this section evaluate particular theories, which may be seen as manifestations of the presuppositions described by the "Objectives" studies, that were advanced by principal figures in the Project about how the educational and theatre experiences affected one another. The first, which is only summarized here, was an experimental test of competing hypotheses about the effects of different types of classroom preparation undertaken in conjunction with student attendance at a performance of a play. The second is a rather informal test of the proposition that it is the artist who is able to predict student responses to a play and, at the same time, able to determine what students will perceive in the play and what they will take it to mean. The third study, also rather informal, compared students who had received special preparation designed to orient them to a forthcoming unconventional play with students who had received no such preparation, to see if the specially prepared students would,

as predicted, understand the play better and appreciate it more. In each of these three cases, even after making all due allowances for design weaknesses and the insensitivity of available measurement techniques, doubts are cast upon the predictive usefulness of the knowledge of the school-theatre interaction possessed by either educators or artists.

DRAMA IN THE SECONDARY ENGLISH CLASS: A STUDY OF THE OBJECTIVES HELD BY ENGLISH TEACHERS, DRAMA TEACHERS, ACTORS, AND SCHOOL ADMINISTRATORS[1]

James Hoetker

and

Richard Robb

From the beginning of the Educational Laboratory Theatre Project, it was clear that almost everyone assumed that the English teachers would bear an important part of the responsibility for maximizing student benefits from the Project and that the treatment given the plays in the classroom would be a crucial element in the overall success of the Project. Funds were provided, for example, to prepare and distribute special curriculum materials for each play to all English teachers and to hold various workshops and inservice training activities.

The English teachers were given this responsibility, unasked, for two reasons: first, Shakespeare, Shaw, Sophocles, and other classic dramatists were already part of the English curriculum; and, second, English is the only course required of almost all students in all grades and it was therefore administratively convenient, as well as apparently logical, to give the English teachers the job of relating the theatre to the curriculum.

With responsibility, however, goes the expectation of a voice in making decisions; and it soon became clear that the English teachers and the theatre people, not to mention the other interested groups, held firm, but often incompatible ideas about how students should be prepared for theatre attendance and about what plays were most suitable for production as part of the Project. It seemed reasonable to assume that these differences stemmed from the fact that the groups held divergent conceptions of drama and consequently also held different objectives for the teaching of drama.

These differences were important for at least two reasons. First, they affected the operation of the Project itself--in the area of play selection, for example, where each group desired the production of plays that they thought would contribute to the attainment of the objectives they valued most highly. Second, the differences seemed to be characteristic of the professional groups involved, and not of a few individuals, so that similar differences could be expected to affect the operation of any school-theatre enterprise.

The present study was therefore undertaken: (1) to describe quantitatively the differences among the objectives held by the various groups; (2) to provide us with categories of objectives that would guide us in constructing tests to be used in a planned experimental study which would test the hypotheses of the various groups about the most effective ways to teach drama; (3) to provide us with information about the relative values placed by the groups on different categories of objectives, so that when the experimental study was completed it would be possible to report results in the following form: "Treatment X produces the highest scores on the objectives most highly valued by actors, but Method Y produces the highest scores in the categories most valued by English teachers."[2]

Development of the Instrument

Several hundred statements of objectives for the teaching of drama were collected from English methods textbooks, publications of professional organizations, curriculum guides, journal articles, books on drama and theatre, and from the writings of others who have concerned themselves with the dramatic experience: psychologists, educators, actors, philosophers, critics, and so forth. The statements so collected were edited to fit the blank in one of the following sentences:

> "An important reason for including the drama in the high school English curriculum is to _____."
>
> "An important reason for including the drama in the high school English curriuclum is that _____."

A preliminary system of categorization of the statements was developed, and a number of English teachers and other educators were asked to sort a sample of the statements into these categories. On the basis of this first sorting, the categories were redefined and the items re-edited to make them as brief and straightforward as possible.

The sorting process was repeated again with a group of student teachers of English in a methods course. These sorters agreed more than 85% of the time in their assignment of specific items to categories. The items which caused disagreement or confusion were examined and discussed with the teachers. In most cases, the disagreements could be clearly traced to an ambiguity in the item or to a weakness in the category definition. The category definitions were revised where necessary and the troublesome items rewritten or discarded.

A total of eight *a priori* categories were decided on by this process. These were grouped into three general divisions and several subdivisions.

Intrinsic Value

1. Intrinsic value. Items referring to the dramatic experience as a thing in itself, valuable without reference to a utilitarian end or value.

Academic Value

Cognitive

2. Dramatic and literary knowledge. Items referring to the mastery of the content of the lessons connected with the play.

3. Literary skills. Items referring to the development and transfer of the skills of analyzing and interpreting plays and other forms of literature.

Affective

4. Appreciation and taste. Items referring to the development of appreciation and good taste, not only in drama, but in other forms of literature, the arts, and the mass media.

Ethical

5. Ethical growth. Items referring to the longer-range development of philosophical insights, moral understandings, and ethical behaviors--the sorts of outcomes claimed for the humanistic disciplines in general.

Utilitarian Value

6. Personal and social benefits. Items referring to the benefits, for the individual and the group, of participation in dramatic activities, apart from the benefits falling in the academic categories above (e.g., self-confidence, teamwork).

7. Benefits to the theatre and the arts. Items referring to the development of specific attitudes and patterns of behavior considered desirable by those involved in theatre and in the arts.

8. Curricular usefulness. Items referring to the drama considered as a vehicle for introducing content into the curriculum (e.g., linguistic study), or for achieving objectives unrelated to those included in the foregoing categories.

When these categories had been decided on, five members of the research staff sat down together and went through the pool of items, assigning them one by one to the categories. In the course of this process further minor revisions were made both in items and in category definitions. No item was assigned to a category unless everyone agreed that it clearly belonged in that particular category.

To construct the questionnarie itself, a table of random numbers was used to select four items from each of the eight categories. The thirty-two items thus chosen were then randomly assigned positions on the questionnaire. A copy of the completed questionnaire is appended to this report and the reader may wish to examine it at this point. The respondents, it will be seen, were asked to rate each item on a seven-point scale running from "strongly agree" to "strongly disagree." On the cover sheet of the questionnaire, each of the points on the scale is verbally defined.

The 32 statements which appear on the questionnaire are listed below, under the category heading to which they were originally assigned. The number of each item is the number by which it was identified on the questionnaire. Following each statement, in parentheses, is the key word or phrase by which the statement is sometimes referred to hereafter, for the sake of brevity.

Category 1. Intrinsic value

5. to engage students in fulfilling and creative activities. (Fulfillment)

6. simply that students enjoy dramatic activities. (Simply enjoy)

10. to bring life and movement into the classroom. (Life in classroom)

14. that play acting is itself an aesthetic experience that no young person should miss. (Aesthetic experience)

Category 2. Dramatic and literary knowledge

17. to give students a thorough understanding of the history and development of the theatre. (History of theatre)

18. to give students a mastery of the critical vocabulary necessary to an intelligent discussion of dramatic literature. (Vocabulary)

20. to familiarize students with the different types of drama--tragedy, comedy, farce, melodrama, and so on. (Types of drama)

22. to acquaint the students with the technical aspects of theatrical production. (Technical knowledge)

Category 3. Literary Skills

12. that study of the drama can develop the students' abilities to deal critically with other forms of literature. (Critical skill)

15. to develop in students the ability to read a play in the way an actor or director reads it. (Read as actor does)

16. to teach students how to interpret symbolism as used in certain types of plays. (Symbolism)

23. to help students to learn how to become more perceptive members of the audience at a play. (Perceptive audience)

Category 4. Appreciation and taste

11. to help students to grow increasingly sophisticated in their selection of plays to watch and read. (Taste in plays)

21. to improve the students' taste in entertainment. (Taste in entertainment)

24. to give students experiences that will enable them to appreciate other great works of art. (Appreciate art)

25. to develop in students a distaste for the cheap and shoddy and sensational in art and literature. (Distaste for bad)

Category 5. Ethical growth

29. that drama provides moral lessons from which students can learn how to better order their own lives. (Moral lessons)

30. to give students a deeper understanding of their own motives and of human nature in general. (Understand self)

31. to help students develop a philosophy of life through contact with the "best thoughts of the best minds." (Philosophy of life)

32. that, by perceiving the world through the senses of persons unlike themselves, students will develop tolerance and a deeper understanding of the human condition. (Tolerance)

Category 6. Personal and social benefits

2. to develop in students the capacity for moving gracefully, easily, and expressively. (Move gracefully)

3. that dramatic activities can help a student develop self-confidence (Self-confidence)

4. to develop in students the habits of cooperation and teamwork. (Cooperation)

13. to extend the range, fluency, and effectiveness of student speech. (Fluent speech)

Category 7. Benefits to the theatre and the arts

1. to encourage students to take part in community dramatic activities. (Community dramatics)

7. to stimulate interest in the theatre so that students will become regular patrons of the professional theatre when they are adults. (Theatre-goers)

8. to teach students how a mature theatre-goer should behave at a play. (Behave at play)

9. to locate student talent for school dramatic activities. (Locate talent)

Category 8. Curricular usefulness

19. that great dramas provide many excellent topics for composition assignments. (Composition)

26. that such study can help students to understand European and American history more thoroughly. (Teach history)

27. that dramatic activities such as improvisation are excellent preparation for creative writing assignments. (Creative writing)

28. that drama, and especially Shakespeare, provides a wealth of examples for study of language and linguistic change. (Linguistics)

The Samples

Although our major concern was with the objectives for drama held by English teachers and members of the resident theatre companies, the questionnaire was also administered to groups of drama teachers and school administrators in the three areas. Although we were, of course, interested in what students involved in the program thought of the place of drama in the schools, it was decided to restrict the study at first to adults who might reasonably be presumed to have more or less clearly structured ideas about the teaching of drama. We feared that the inclusion of a sample of students, many of whom would probably not have opinions on the subject, and who might tend to respond randomly or according to some unpredictable set, would greatly reduce our chances of finding conceptually meaningful factors.

The sample of English teachers (N = 116) was chosen by a two-step process. First, information gathered earlier on the schools (enrollment; socio-economic status; public, private, or religious management; coeducational or sexually segregated student body) was used to construct a stratified sample of participating schools in each area. Then from the schools in this sample, English teachers were chosen at random in a number proportionate to the student enrollment.

In each of the schools in the sample, the questionnaire was also given to the drama teacher, if there was one, and to either the principal or assistant principal, if one of them was available. The sample of school administrators (N = 26) may be taken as representative of the population of administrators in the areas. But the sample of drama teachers (N = 21) is more problematical. Drama is a marginal activity in most school systems, and all of the teachers identified as drama teachers also taught English or some other subject. Furthermore, the presence or absence of a drama teacher in a particular school depended on the geographical area and, within an area, was related to the socio-economic level of the school. Therefore, although the results for drama teachers are included in the present report, they should be very cautiously interpreted.

The sample of resident company members, hereafter called "actors," (N = 48) is an almost complete sample[3] of the members of the casts of the plays that were in production at the time the instrument was administered. In regard to the theatre project cities, the actors may well be looked on as the population of actors, rather than as a sample. How representative they may be of the population of actors nationwide is probably impossible to establish. Aside from the fact that none of them were established stars, however, there is no apparent reason for thinking the actors unrepresentative of, say, the population of Equity members currently working as performers.

Administration of the Questionnaire

In every case, the questionnaire was taken to a school or theatre by an interviewer who presented the respondent with a brief printed explanation of the study, waited while the questionnaire was completed, and then carried away the completed questionnaire. This procedure made the administration of the questionnaires a rather lengthy and expensive process, but it obtained responses from everyone in the primary English teacher sample and, certainly, from more members of the other groups than would have responded otherwise.

The questionnaires were thus administered to about one-half of the total sample during the spring of 1968. The analyses of this partial data provided guidance for the construction of the tests for the experimental study of teaching methods that was mentioned earlier. The questionnaire was administered to the remainder of the sample immediately after the opening of school in the fall of 1968.

Expectations

We undertook this study with some preconceptions about what we might find, based on our previous experiences with the theatre project. The English teachers, we thought, would rate most highly those objectives having to do with subject matter learning and with the high level "ethical objectives." They would also, it seemed likely, place little value on non-verbal outcomes and on those related to the welfare of the theatre. The school administrators, we would have predicted, would give the highest ratings to those objectives having to do with social learning. We expected the actors to value most highly the objectives concerned with affective change, personal development, and benefit to the theatre. The drama teachers we were less sure of, but thought they might fall somewhere between the actors and English teachers. Some of these expectations, as we shall see, were confirmed, but there were also a number of surprises.

Item Mean Ratings

Since the statements included as items on the questionnaire were all obtained from reputable printed sources, it was not to be expected that many of them would appear so trivial or wrongheaded as to be rejected by any large number of respondents. This indeed proved to be the case, and the mean ratings given to most of the items were well toward the positive or "agree" end of the scale, on which "strongly disagree" equals one point and "strongly agree" seven points. The mean rating of all respondents on all items was 5.31, and the mean rating of only one item fell below 4.00. As shown on Table 1, on which the means are rank-ordered, item means ranged from 3.57 up to 6.33, with a standard deviation of 0.73.

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Insert Table 1 Here

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Results of a Discriminant Function Analysis

The first question at issue in this study was whether the four groups of respondents could be discriminated by means of their ratings of items on a questionnaire designed to describe the structure of the objectives held for the teaching of drama. A linear multiple discriminant function analysis of the item scores of all respondents on all items was carried out. Four patterns of responses to the 32 items were statistically derived, and each respondent was assigned to one of these patterns on the basis of his responses. If it had been the case that the responses of all English teachers and of no one else had fallen into Pattern 1, and that the other three groups had been similarly perfectly discriminated, the analysis would have yielded the following matrix:

	Statistically derived groups			
	1	2	3	4
English teachers	116	0	0	0
Drama teachers	0	21	0	0
Actors	0	0	48	0
Administrators	0	0	0	26

In fact, the analysis yielded the matrix which is given below in two forms. First, the number of respondents from each group assigned to each response pattern, then the percentage of the respondents from each group assigned to each pattern.

	Statistically derived groups				
	1	2	3	4	N
English teachers	76	13	10	17	116
Drama teachers	0	13	3	5	21
Actors	5	6	31	6	48
Administrators	5	2	2	17	26

TABLE 1. Means and Standard Deviations of the Ratings of All Respondents (N = 211), With Item Ratings Rank-ordered

Item No.	Mean	S.D.	Item No.	Mean	S.D.
9	3.57	1.73	7	5.35	1.67
1	4.13	1.73	4	5.38	1.45
15	4.18	1.73	6	5.45	1.39
2	4.21	1.93	16	5.46	1.31
22	4.45	1.54	3	5.56	1.39
8	4.65	1.90	31	5.73	1.42
26	4.73	1.60	13	5.75	1.08
19	4.92	1.78	11	5.84	1.29
27	4.93	1.52	5	5.90	1.14
17	5.04	1.51	20	6.04	1.09
10	5.17	1.58	21	6.08	1.15
18	5.19	1.45	23	6.14	1.04
25	5.19	1.74	24	6.14	0.98
29	5.20	1.56	30	6.19	1.18
14	5.24	1.49	32	6.31	1.02
28	5.35	1.42	12	6.33	0.98

Grand Mean = 5.31

S.D. = 0.73

Range = 2.76 Points

	Statistically derived groups				
	1	2	3	4	%
English teachers	65.5	11.2	8.6	14.7	100.0
Drama teachers	0.0	61.9	14.3	23.8	100.0
Actors	10.4	12.5	64.6	12.5	100.0
Administrators	19.2	7.7	7.7	65.4	100.0

The generalized Mahalanobis D-square yielded by the analysis was 238.06; this statistic may be used as a chi-square with, in this case, 96 degrees of freedom. The probability of the distribution in the above matrices occuring by chance is less than one in one thousand, so the four groups indeed may be discriminated by means of their responses to the questionnaire used in this study.

Group Means on Items

Columns 1 to 4 in Table 2 summarize the group mean ratings on each of the 32 items and give the group means over all items. Although the absolute ratings given to an item differ among groups, sometimes considerably, there is a tendency for all groups to give similar ratings to an item relative to the other items. (See Table 5, below.)

- - - - - - - - - - - - -
Insert Table 2 Here
- - - - - - - - - - - - -

Analysis of Variance[4]

Column 5 in Table 2 gives the F-ratios derived from an analysis of variance of the differences among the ratings given to each item by the four groups. Column 6 in the same table gives the level of significance of each F-ratio, and an asterisk marks those values beyond the .05 level of significance, a total of 16 cases.

Principal Components Factor Analysis

The ratings of all respondents to all items were subjected to a principal components factor analysis, using a varimax rotation. The rotated factor loadings for the nine factors with eigen values greater than 1.0 are given in Table 3. These nine factors together account for 65.33 per cent of the total variance.

- - - - - - - - - - - - -
Insert Table 3 Here
- - - - - - - - - - - - -

TABLE 2 . Group Mean Scores on All Questionnaire Items, with F-Ratios, and Significance Levels of Differences Among Means

Item Number and Key Words	Mean Scores				$F_{3,207}$	P <	Item Number
	English	Drama	Actor	Administrator			
	1	2	3	4	5	6	
1. Community dramatics	3.92	4.29	4.42	4.58	1.313	0.271	1
2. Move gracefully	3.86	4.71	4.50	5.15	4.023	0.008*	2
3. Self-confidence	5.31	6.29	5.67	6.12	5.658	0.001*	3
4. Cooperation	5.18	6.10	5.58	5.54	3.845	0.010*	4
5. Fulfillment	5.73	6.29	6.17	6.04	2.765	0.043*	5
6. Simply enjoy	5.57	5.24	5.31	5.27	1.330	0.266	6
7. Theatre-goers	5.28	5.71	5.69	4.92	1.290	0.279	7
8. Behave at play	4.57	5.43	4.23	5.23	2.704	0.046*	8
9. Locate talent	3.39	4.33	3.52	4.04	2.266	0.082	9
10. Life in classroom	5.23	4.76	5.15	5.19	0.774	0.510	10
11. Taste in plays	5.94	6.09	5.47	5.77	1.716	0.165	11
12. Critical skill	6.36	6.48	6.14	6.39	0.816	0.487	12
13 Fluent speech	5.59	6.00	6.04	5.93	3.118	0.027*	13
14. Aesthetic experience	5.25	5.76	4.92	5.42	1.890	0.132	14
15. Read as actor does	4.25	4.19	3.79	4.54	1.187	0.316	15
16. Symbolism	5.68	5.71	4.81	5.27	4.092	0.008*	16
17. History of theatre	5.02	5.29	4.92	5.15	0.603	0.614	17
18. Vocabulary	5.27	5.29	4.83	5.27	0.943	0.421	18
19. Composition	5.04	5.10	4.50	4.85	0.789	0.501	19
20. Types of drama	6.15	6.29	5.60	6.04	2.964	0.033*	20
21. Taste in entertainment	6.08	6.33	5.92	6.12	2.120	0.099	21
22. Technical knowledge	4.45	5.19	4.16	4.42	2.699	0.047*	22
23. Perceptive audience	6.18	6.48	5.79	6.23	3.063	0.029*	23
24. Appreciate art	6.17	6.33	6.04	6.00	0.924	0.430	24
25. Distaste for bad	5.43	5.29	4.23	5.54	7.400	0.001*	25
26. Teach history	4.48	4.86	5.21	5.12	3.725	0.012*	26
27. Creative writing	4.94	4.81	4.98	4.89	0.081	0.970	27
28. Linguistics	5.09	5.52	5.85	5.65	8.067	0.001*	28
29. Moral lessons	5.41	5.38	4.71	4.85	1.889	0.133	29
30. Understand self	6.46	5.86	5.77	5.69	6.857	0.001*	30
31. Philosophy of life	5.97	5.67	5.17	5.46	4.197	0.007*	31
32. Tolerance	6.50	6.10	5.96	6.08	3.231	0.023*	32
Mean	5.31	5.54	5.17	5.40			

TABLE 3. Rotated Factor Loading of

Nine Factors with Eigen Values Greater than 1.0

Item No.	Factor No. 1	2	3	4	5	6	7	8	9
1	.338	-.073	-.032	-.341	-.329	-.403	.209	.254	-.087
2	.696	-.038	.023	-.138	.324	-.222	.013	.079	-.157
3	.781	.047	-.066	-.039	-.190	-.042	.069	.033	-.111
4	.778	-.065	-.083	-.220	-.079	.083	-.091	-.021	.192
5	.748	.226	-.003	.039	.154	-.160	.004	.128	.198
6	.163	.096	.032	-.111	.079	-.134	-.046	.758	.055
7	.175	.085	-.025	-.705	.044	-.188	-.180	.121	-.088
8	.184	.082	-.075	-.612	-.217	-.266	-.227	.118	-.195
9	.497	-.140	-.028	-.300	-.232	-.382	-.018	.112	-.035
10	.354	.058	-.157	-.131	-.219	.061	-.497	.409	-.083
11	.121	.198	-.399	-.505	.148	.050	-.418	.069	.104
12	.050	.157	-.369	-.065	-.198	-.015	-.588	.095	.265
13	.680	.138	-.072	.021	-.143	-.064	-.336	-.041	-.011
14	.356	.157	-.201	-.002	-.403	-.056	-.133	.301	.035
15	.163	.112	-.355	-.135	-.095	-.476	-.167	.055	-.139
16	.035	.083	-.781	-.024	-.109	-.053	-.130	.120	.096
17	.101	.036	-.547	-.049	-.112	-.617	-.107	-.140	.084
18	.166	.207	-.714	-.082	.126	-.371	-.130	-.192	.033
19	.130	.209	-.600	-.201	-.461	-.011	.074	-.145	-.100
20	-.149	.003	-.581	-.099	-.391	-.263	-.046	.045	.252
21	.043	.167	-.077	-.690	-.117	.016	-.014	-.074	.281
22	.080	.107	-.125	-.108	-.133	-.731	-.005	.098	.130
23	.004	.198	-.061	-.232	.036	-.371	-.607	-.104	.174
24	.072	.183	-.178	-.127	-.140	-.096	-.212	.032	.699
25	-.098	.288	-.129	-.546	-.116	-.078	.333	.006	.303
26	.184	.135	-.036	-.056	-.595	-.360	-.233	-.108	.075
27	.241	.115	-.167	-.082	-.704	-.036	.023	-.049	.117
28	.271	-.011	-.111	-.057	-.475	-.229	-.073	-.487	.039
29	.064	.760	-.091	-.220	-.210	-.009	-.041	-.022	-.200
30	.031	.839	-.065	-.037	.001	-.082	-.112	.028	.123
31	-.001	.760	-.240	-.218	-.059	-.043	-.002	-.033	.033
32	.119	.747	.001	.008	-.041	-.079	-.152	.127	.304
Percent. of variance	11.7	9.3	8.8	7.8	7.1	7.0	5.5	4.3	3.9

It was arbitrarily decided to include in any factor only those items which loaded .500 or higher on the factor. The items in each factor meeting that criterion are listed below, by item number and key word. Each of the factors makes conceptual sense and was easily assigned a title.[5] Taken together, they reasonably approximate the *a priori* categories devised during the construction of the questionnaire.

Factor 1. Noncognitive personal development.

2. Move gracefully
3. Self-confidence
4. Cooperation
5. Fulfillment
13. Fluent speech

Factor 2. Ethical growth.

29. Moral lessons
30. Understand self
31. Philosophy of life
32. Tolerance

Factor 3. Literary knowledge.

16. Symbolism
17. History of theatre
18. Vocabulary
19. Composition
20. Types of drama

Factor 4. Improvement of taste and behavior.

7. Theatre-goers
8. Behave at play
11. Taste in plays
21. Taste in entertainment
25. Distaste for bad

Factor 5. Curricular utility.

26. Teach history
27. Creative writing

Factor 6. Theatre-specific knowledge.

17. Hostory of theatre
22. Technical knowledge

Factor 7. Transfer of skills.

12. Critical skill
23. Perceptive audience

Factor 8. Enjoyment.

6. Simply enjoy

Factor 9. Art appreciation.

24. Appreciate art

- - - - - - - - - - - - -
Insert Table 4 Here
- - - - - - - - - - - - -

Table 4 compares the a priori categories with the factors. Factor 1, "Noncognitive personal development," includes all four items from a priori category 6, "Personal and social benefits," and one item (5. "Fulfillment") which had originally been construed as belonging in the "Intrinsic value" category. Factor 2 corresponds exactly to a priori category 5, "Ethical growth." Factor 3, "Literary knowledge," includes three of the original four items from category 2, "Dramatic and literary knowledge," and also includes item 16 ("Symbolism") and item 19 ("Composition"), which had been placed in categories 3, "Literary skills," and 8, "Curricular utility," respectively. Our respondents apparently distinguished matters specific to the literature class from those more common to the drama class. Two of the items of the latter sort from category 2--item 17 ("History of drama") and 22 ("Technical knowledge")--together form a separate factor, 6.

Factor 4, "Improvement of taste and behavior," includes items from a priori categories 4 and 7--"Appreciation and taste" and "Benefits to the theatre and the arts." These items appear to have in common the elements of improvement of taste and behavior. The two items from category 7 which do not load on any factor--item 1 ("Community dramatics") and 9 ("Locate talent") are certainly the most trivial of the objectives and were so rated by the respondents. Our reason for having grouped these items with item 7 ("Theatre-goers") and 8 ("Behave at play") in category 7 had, in part, to do with the element of practicality common to the items, as well as to their all being related to the theatre. But it seems upon re-examination that our grouping was expedient rather than insightful, and that the grouping represented in factor 4 makes sounder sense.

It is interesting that the fourth item from the "Appreciation and taste" category--item 24 ("Appreciate art")--falls out as the single-item Factor 9. Probably the term "art appreciation" has denotations and connotations that are so firmly established that the respondents inevitably would rate the item independently of their ratings of the more narrowly dramatic or literary appreciation items with which it had been associated in the construction of the questionnaire.

TABLE 4. Comparison of Items Assigned to Eight *A Priori* Categories and Items Loading .500 or Higher on Nine Factors

Category	Item	Factor Numbers								
		1	2	3	4	5	6	7	8	9
1	5	.748								
	6									
	10								.758	
	14									
2	17			-.547			-.617			
	18			-.714						
	20			-.581						
	22						-.731			
3	12							-.588		
	15									
	16			-.781						
	23							-.607		
4	11				-.505					
	21				-.690					
	24									.699
	25				-.546					
5	29		.760							
	30		.839							
	31		.760							
	32		.747							
6	2	.696								
	3	.781								
	4	.778								
	13	.680								
7	1									
	7				-.705					
	8				-.612					
	9									
8	19		-.600							
	26					-.595				
	27					-.704				
	28									

Item 6 ("Simply enjoy") also constitutes a single item factor, 8. This was really no surprise, since though we had often found expressed the idea that drama should be done simply because it is good, we had found it extremely difficult to collect a non-redundant pool of items for the a priori category 1 which we labelled "Intrinsic value." It is probably the case that all the items which really belong in this category are merely verbal variations on "because it is good."

Differences Among Groups on Items Within Factors

Let us first dispose of the five weaker factors, 5 through 9. The groups did not differ significantly in their ratings of either of the single item factors, 8 and 9. Each group gave item 6 (Factor 8) a moderate rating and item 24 (Factor 9) a quite high one. Each of the two item factors contains one item which discriminated among groups and one which did not. In Factor 5, item 26 ("Teach history") was rated rather high by actors and administrators, lower by drama and English teacher ($F_{3,207} = 3.73$; $P < .05$). It is expected that English and drama teachers would not be overconcerned with teaching history; but we were reminded that it had been called to our attention earlier that while most teachers think history should be taught so students can understand plays, most actors think plays are a good way to teach history.

In Factor 6, "Theatre-specific knowledge," item 22 ("Technical knowledge") was rated quite low by everyone except the drama teachers, who gave it a moderate rating ($F_{3,207} = 2.70$; $p < .05$).

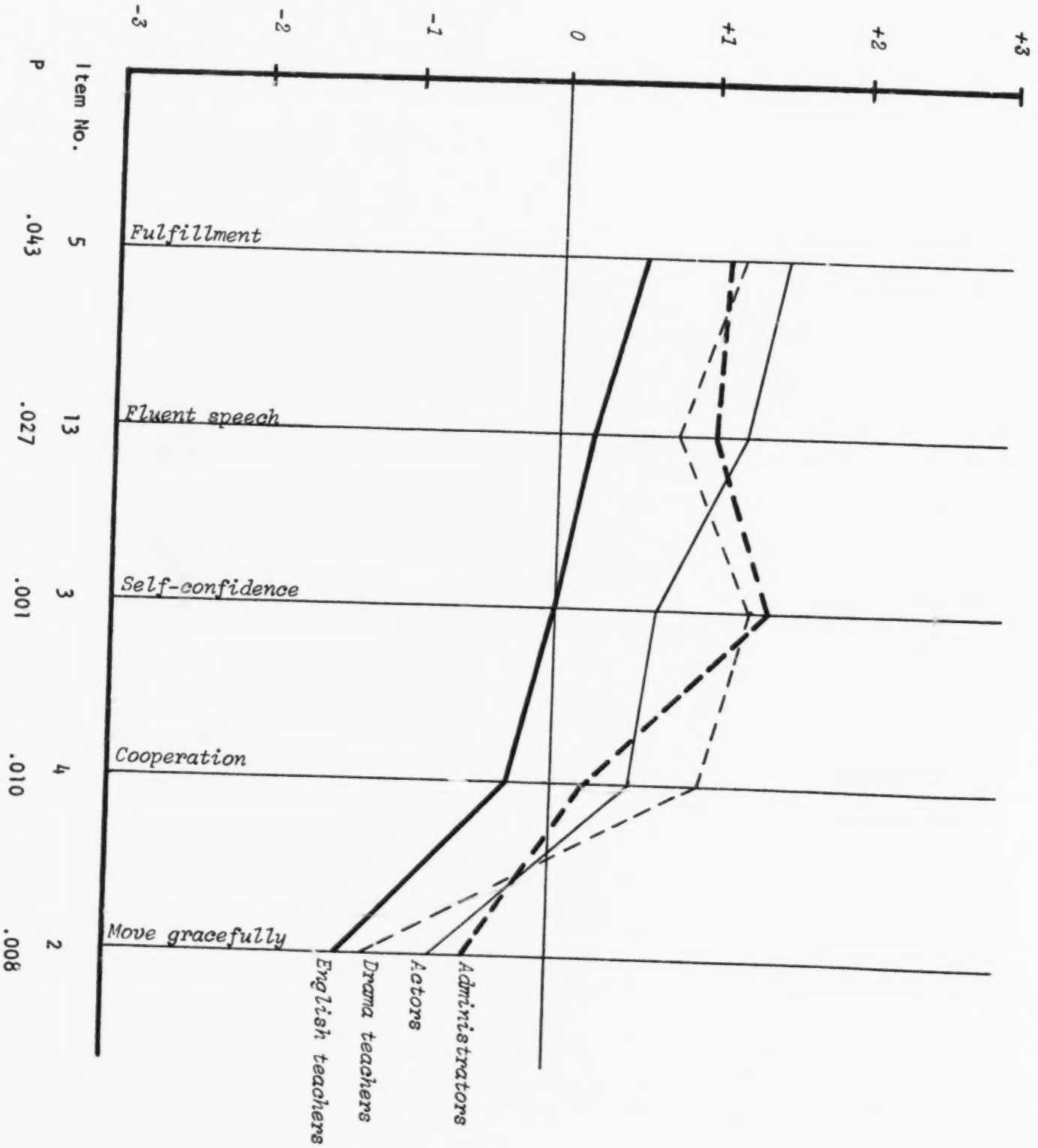
In Factor 7, "Transfer of skills," item 23 ("Perceptive audience") was rated very highly by everyone except, a bit surprisingly, the actors, who gave it a moderately high rating ($F_{3,207} = 3.06$; $P < .05$). Very likely, the actors perceived that the job of educating an audience is one that can only be done, ultimately, in the theatre itself.

Figures 1 through 4 graphically illustrate the variations among the four groups in their ratings of the items in the four strongest factors. In each of these figures, the items are arranged in order of the mean ratings given them by the English teachers. Means have been converted into standard scores to compensate for the differences in overall means among groups. The significance level of the differences among the groups is given beneath the number of each item.

- - - - - - - - - - - - -
Insert Figure 1 Here
- - - - - - - - - - - - -

The items in Factor 1, "Noncognitive personal development," refer to outcomes that are attainable only if the student participates in dramatic activities--gracefulness, self-confidence, more fluent speech, cooperation. Obviously, these objectives would be less than important to one who conceived of drama primarily as a literary genre rather than as a physical and oral activity, for he would see the educational function in regard to drama as studying it rather than doing it. Figure 1 suggests that, to a much greater extent than the other groups, the English teachers so regard drama.

FIGURE 1. Comparison of Group Means, in Standard Score Form, on Items in Factor 1, "Noncognitive Personal Development"



The differences among the groups on all five items are significant, and in all cases the English teachers give the items the lowest ratings. The differences among the other three groups in their ratings are non-significant. One inference that may be made is that the English teachers do not see dramatic activity as of primary importance to the study of drama. (This attitude, if typical, is probably a reflection of the teacher's self-definition of his role as English teacher, and it will certainly provide an obstacle to those current reformers who would like to see English teachers give a more central place in the English curriculum to dramatic activity.)

- - - - - - - - - - - - -
Insert Figure 2 Here
- - - - - - - - - - - - -

Figure 2 compares the groups in their ratings of the items in Factor 2, "Ethical growth." The differences among the groups are significant on the three most highly rated items, with the English teachers in each case rating the objectives more highly than the other groups and being alone in rating the fourth item--29 "Moral lessons"--above the mean rating of all items. All differences between actors, drama teachers, and administrators are non-significant.

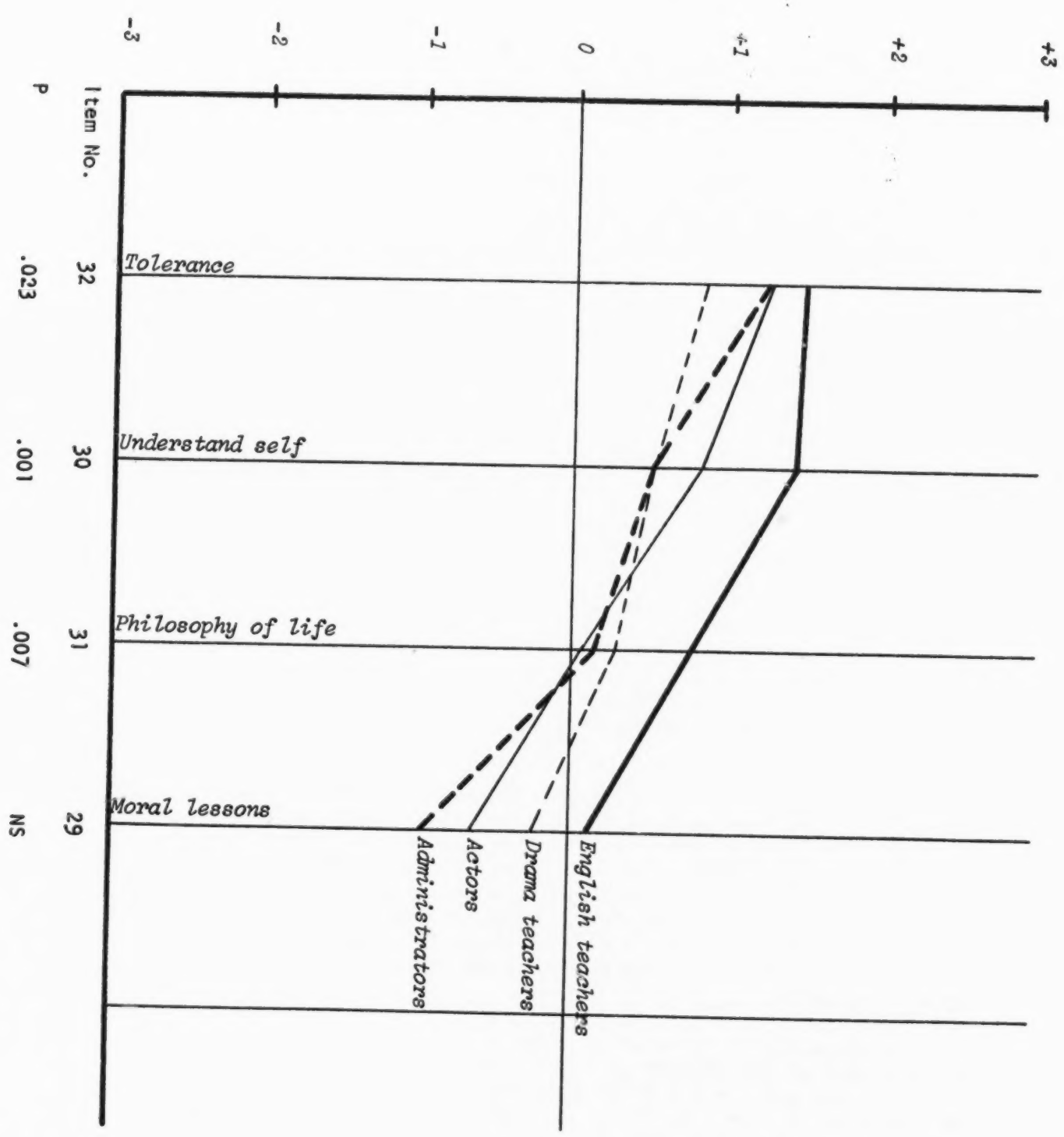
Item 29 specifies a way of using drama toward ethical ends ("drama provides moral lessons..."), which the respondents may have perceived as embodying a naive or simplistic attitude toward drama and which possibly modified their approval of the latter part of the objective ("from which students can learn how to better order their own lives.").

The objectives in this factor--tolerance, self-understanding, development of a philosophy of life, ordering one's own life--are, of course, prominent in arguments in favor of a liberal education, particularly one built around the literary classics. These objectives, also, unlike those in the other categories, have no special relationship to drama, except insofar as drama is a branch of literature.[6]

Obviously, one who believes that drama is in the curriculum in the service of objectives such as these is bound to prefer a different sort of play--of primarily literary and philosophical merit; one that is "teachable"--than a person whose preference for a play is based on theatrical considerations. Further, the person who most highly values these ethical objectives may feel little need to include theatre and dramatic activities, as distinct from dramatic literature, among the experiences his students must have in order to reap the benefits of a liberal education.

The disparities revealed here between the values placed upon personal-social and ethical objectives by actors and English teachers may do a good deal to aid in an understanding of the difficulties in communication between the theatre personnel and the English teaching community that have bothered most school-theatre enterprises.

FIGURE 2. Comparison of Group Means, in Standard Score Form, on Items in Factor 2, "Ethical Growth"



- - - - - - - - - - - - -
Insert Figure 3 Here
- - - - - - - - - - - - -

Only two of the five items in Factor 3, "Literary knowledge," differentiate among the groups. In regard to item 20 ("Types of drama"), the actors rate this item considerably lower than the other groups, perhaps in fear of the results of over-emphasis upon the scholarly trappings of drama, rather than upon the play itself. The actors again, this time joined by the administrators, also place a lower value than the teachers upon item 16, which refers to students "learning how to interpret symbolism." The dichotomy here is not between the theatre and the schools, but between those who are keepers of the specialized skill of literary interpretation and those who are not.

- - - - - - - - - - - - -
Insert Figure 4 Here
- - - - - - - - - - - - -

Two of the five items in Factor 4, "Improvement of taste and behavior" also discriminate among the groups, and in both cases it is the actors who diverge from the three groups of school people. On each of the three factors just considered, while the groups differed in the absolute value they placed upon the items, there was a tendency for them to agree on the relative importance of the items in a factor. In the present case, however, the actors' ratings diverge from this pattern.

Item 25, which three groups gave a moderate rating, reads, "to develop in students a distaste for the cheap and shoddy and sensational in art and literature." This item was rated by the actors above only items 9 ("Locate talent") and 22 ("Technical knowledge") among the 32 items. Whether this discrepancy--the actors rated the item at least a full point lower than any of the other groups--is due to their rejection of the idea of drama being used for negative purposes or to their distrust of the effects upon students' reception of theatre of the conception of art implied in the statement or to something else cannot be established from the data; but the divergence is thought-provoking.

The actors differed most from the administrators in rating item 7 ("Theatre-goers"), although the difference is non-significant, with the actors understandably placing more value on the objective of getting students to become patrons of the theatre. What may be surprising here, considering that personal interest is involved, is that the difference was not greater.

The final contrast to be considered is that on item 8. We had rather expected the school administrators to place high value upon deportment items such as this one, which reads, "to teach students how a mature theatre-goer should behave at a play." But, although the administrators and drama teachers did rate this objective more

FIGURE 3. Comparison of Group Means, in Standard Score Form, on Items in Factor 3, "Literary Knowledge"

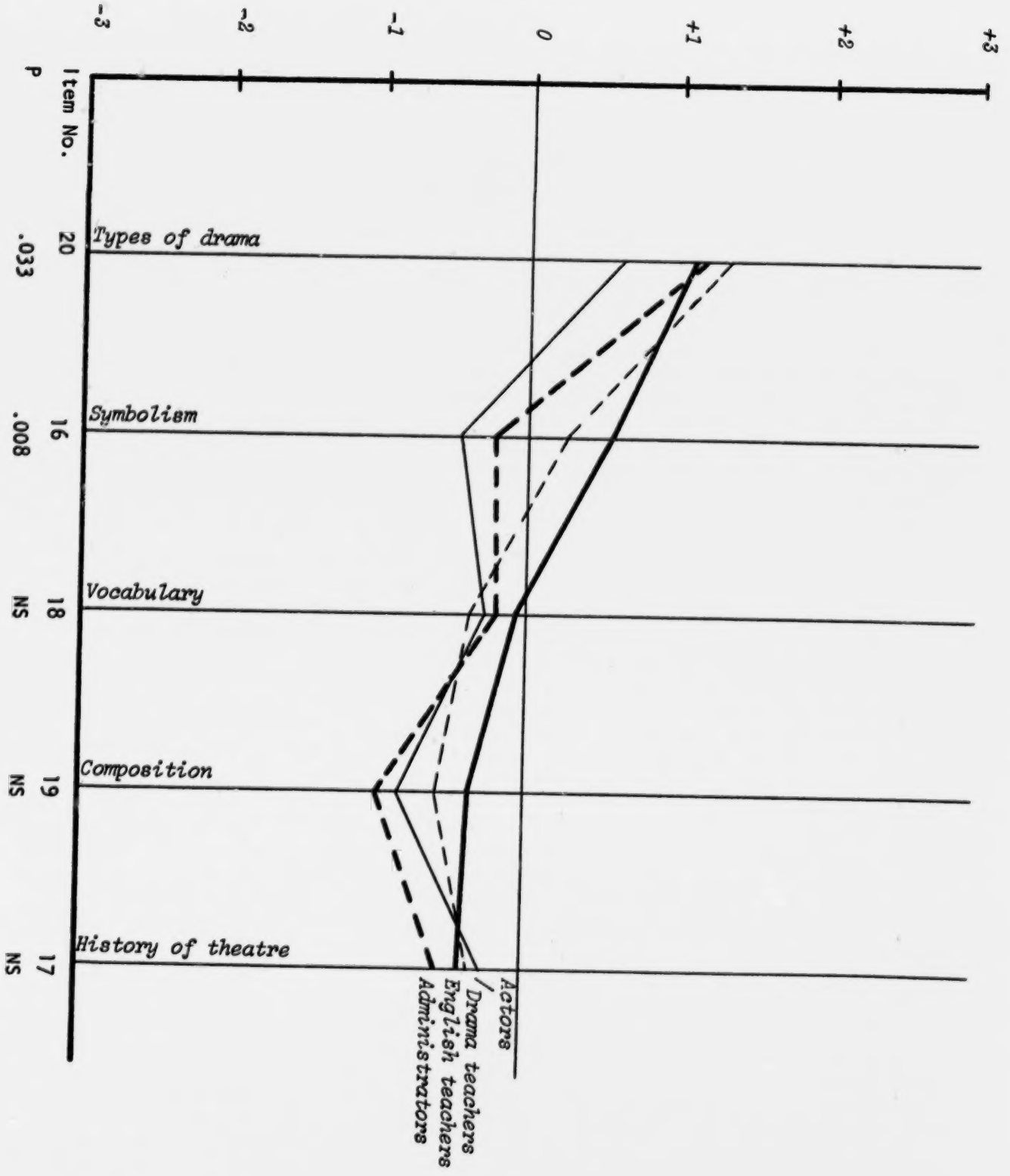
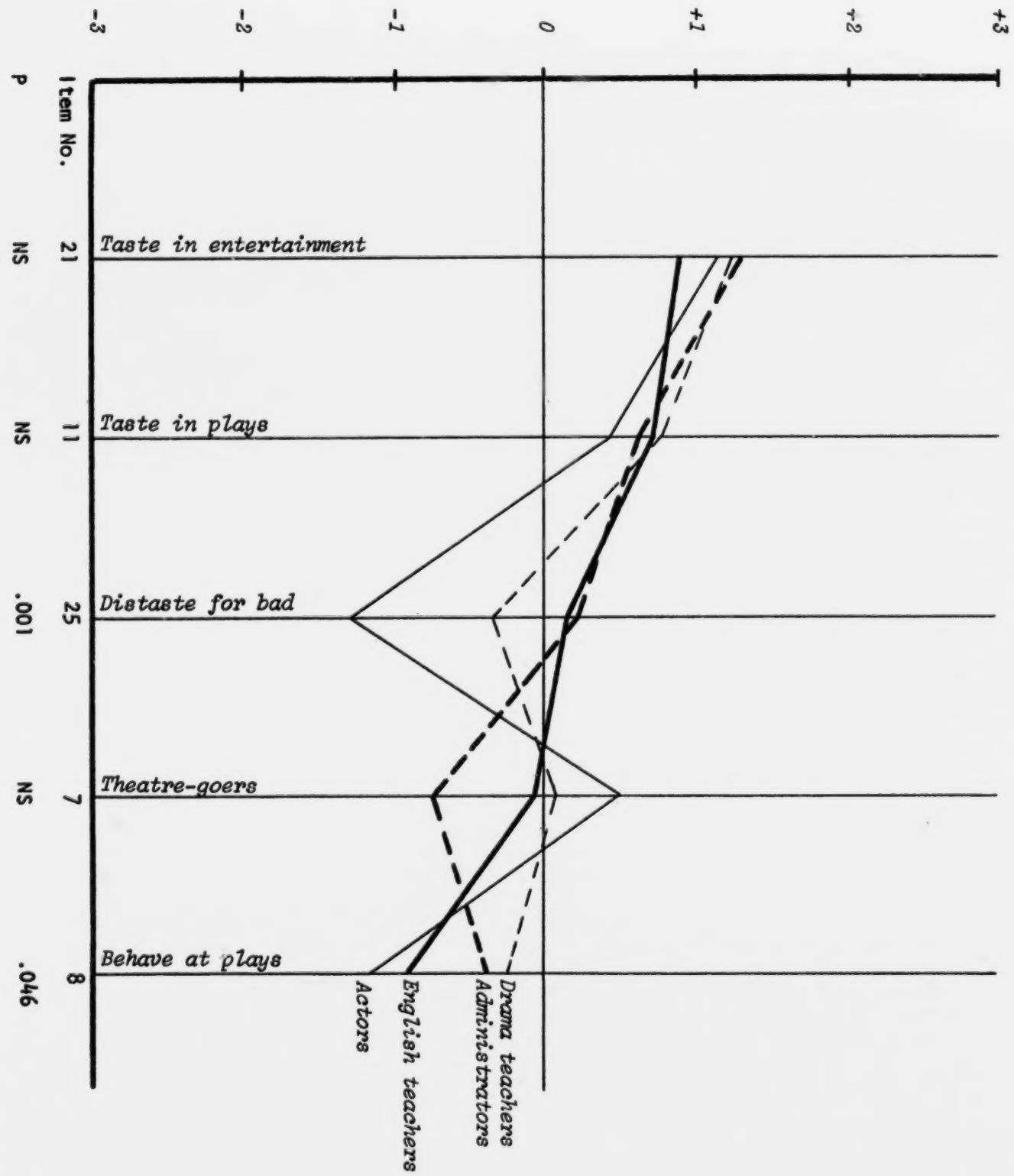


FIGURE 4. Comparison of Group Means, in Standard Score Form, on Items in Factor 4, "Improvement of Taste and Behavior"



highly than the actors or English teachers, it is notable that all four groups rated it below their respective means. The low rating given the objective by actors and English teachers is probably due to the fact that the two groups agreed that the learning of theatre behavior is largely a theatre rather than a classroom matter.

Discussion

One might continue to spin out speculations about why differences exist among the groups on particular items, for not all of the differences that were found have been discussed. But in the case of single items it is wiser not to go too far, since it is a common observation that changing the wording of an item even slightly may cause it to elicit quite different responses.

One is on firmer ground dealing with responses to an entire instrument or to a group of conceptually related items, such as the factors we have discussed. We would suggest that the analyses reported above permit us to draw three conclusions with some confidence.

First, the four groups studied do, as anticipated, differ in the values that they place upon different types of objectives ostensibly attainable through drama or the study of drama. These differences in objectives seem to be related to different understandings of the manifestly ambiguous term drama.

Second, the groups are most clearly discriminated by their responses to the items in Factors 1, "Noncognitive personal development," and 2, "Ethical growth." The English teachers place significantly lower values upon the Factor 1 objectives, all of which presuppose student engagement in dramatic activities, than do the actors and the other two groups of educators. From this it may be inferred that the English teachers think of drama as most importantly a verbal and literary matter, or, at least, that they do not feel it is proper to give a great deal of attention to the nonliterary dimensions of drama in the English classroom.

The English teachers also placed significantly higher value than the other groups on the ethical or philosophical objectives represented by the items in Factor 2. These objectives are among the traditional justifications for a literary education, and the value of them by the English teachers is consonant with the emphasis on drama as literature that was inferred from the responses to items in Factor 1.

It may be fair to say, on this evidence, that, if the expectation was that the interests and the training of English teachers would be automatically congruent with the needs of the theatre, then the choice of the English teachers as the primary agents for integrating theatre into the curriculum was naive. However, if the expectation was that the responsibility for preparing students for the theatre would force

English teachers to examine their own practices and to devise and try out new approaches to drama, that is another matter. And there is considerable evidence that, in many schools, the Educational Laboratory Theatre Project has indeed had the effect of broadening and enriching the English curriculum and introducing new practices, such as improvisation, which require a redefinition of the English teachers' traditional role. Whether these changes are widespread and deep enough to alter the structure of objectives held by English teachers will be the question at issue in a later replication of this study.

The third conclusion that may be drawn is that, despite the differences that have been demonstrated in regard to certain clusters of items, the four groups agree highly about the relative importance of the educational objectives represented by the items on the questionnaire. The extent of their agreement is described below in two ways.

Table 5 shows the ranks assigned by each group to the 32 items. When Kendall's coefficient of concordance W, corrected for tied ranks, is computed for these data, W=.86. W may be used in calculating the average intercorrelation between groups, $\bar{r}=(nW-1)/(n-1)=(4(.86)-1)/(4-1)=.81$, a value which allows us to reject the hypothesis that the four sets of ranks are independent, $P<.01$.[7]

- - - - - - - - - - - -
Insert Table 5 Here
- - - - - - - - - - - -

A similar procedure, using the mean ratings summarized in columns 1 to 4 in Table 2, utilizes analysis of variance to estimate the reliability of the measurements. The analysis of variance for these data are summarized in the following table.

Source of variation	SS	df	MS
Between items	51.60	31	1.66
Within items	10.75	96	.11
Between groups	9.92	3	3.31
Residual	.83	93	.01
Total	62.35	127	

The variation in column means between the groups (see Table 2) may be taken to represent systematic variations in frame of reference between the groups. Variations due to frame of references should not be considered as part of the error of measurement. An estimate of the reliability of a single rating for the adjusted data is given by

$$r_1 = \frac{MS_{\text{between items}} - MS_{\text{within items}}}{MS_{\text{between items}} + (k-1)(MS_{\text{within items}})} = \frac{1.66 - .11}{1.66 + .33} = .78.$$

TABLE 5. Ranks Assigned to the Questionnaire Items by Each of the Four Groups of Respondents

Item No.	Ranks			
	English teachers	Drama teachers	Actors	Administrators
1	30	31	27	29
2	31	29	26	22.5
3	16	6	11	3.5
4	21	8.5	13	13.5
5	10	6	1	6.5
6	13	23	15	18
7	17	14.5	10	25
8	26	18	28	20
9	32	30	32	32
10	20	28	18	21
11	9	10	14	10
12	3	1.5	2	1
13	12	11	3.5	9
14	19	13	21	16
15	29	32.	31	30
16	11	14.5	23	18
17	24	21	20	22.5
18	18	21	22	18
19	23	25	25	28
20	6	6	12	6.5
21	7	3.5	6	3.5
22	28	24	30	31
23	4	1.5	8	2
24	5	3.5	3.5	8
25	14	21	29	13.5
26	27	26	16	24
27	25	27	19	26
28	22	17	7	12
29	15	19	24	27
30	2	12	9	11
31	8	16	17	15
32	1	8.5	5	5

This is an approximation of the average intercorrelation between ratings given by pairs of groups.[8]

In either case, it is clear that the significant mean differences between the ratings of the four groups represent departures from a significant pattern of agreement between the groups about the relative importance of the educational objectives represented on the questionnaire. The differences that discriminate among the groups, that is to say, occur within a narrow range of high mean scores (see Table 1) and between sets of ratings that are highly correlated ($P<.01$).

Conclusion

The differences in objectives and values that have been described in this study as existing between English teachers and professional actors, as well as between these two groups and drama teachers and school administrators, are basic and important differences, of the sort that influence preferences, decisions, and behaviors. The clear distinction between the groups revealed by the discriminant analysis, and the fact that the description of the differences among groups has evoked the shock of recognition from readers familiar with the problems of school-theatre projects, suggest that the differences are indeed functions of the occupational groupings that were studied. If that is so, the differences are among the realities that must actively be taken into account by those responsible for planning educational programs involving the cooperation of English teachers and professional actors, and by educators contemplating reforms in the teaching of English which would require English teachers to begin considering literature and language as basically dramatic in their natures.

However, the finding that the groups are generally in agreement about the relative importance of the various objectives for drama gives reason for expecting that, if the differences which inhibit communication are honestly faced and frankly discussed, collaboration between the schools and the theatre may be rendered easier and more fruitful.

APPENDIX: THE "PLACE OF DRAMA" QUESTIONNAIRE

Please check one and fill in the appropriate blank.

___ School administrator ___ Drama teacher

___ English Teacher School _____

___ Repertory Company member: Location _____

Each of the sentences below expresses a purpose for the inclusion of drama in secondary English curriculum that has been advanced in a published book, article, or curriculum guide. We would like to know what you, personally, think of each of these suggested objectives.

To record your judgment of each statement, circle the symbol to the right of the statement that best expressed the strength of your agreement or disagreement with the statement. The key below explains how each symbol should be interpreted.

Judge each item independently. Work fairly quickly and record your initial reaction to each statement.

KEY

SA (Strongly agree)	MEANS. . .	"This is a very important reason and one that should guide the classroom conduct of all English teachers."
A (Agree)	MEANS. . .	"This is an important reason, but probably not of primary importance in the average English classroom."
AR (Agree with reservations)	MEANS. . .	"This is a reasonable objective for including drama in the curriculum for some types of English classes."
NO (No opinion)		
DQ (Disagree, with qualifications)	MEANS. . .	"This is not ordinarily an important reason for including drama in the English curriculum."
D (Disagree)	MEANS. . .	"This is not an important reason for including drama in the English curriculum."
SD (Strongly disagree)	MEANS. . .	"This is not a legitimate or defensible reason for including drama in the English curriculum."

AN IMPORTANT REASON FOR INCLUDING THE DRAMA IN A HIGH SCHOOL ENGLISH CLASS IS:	Strongly agree	Agree	Agree, reservations	No opinion	Disagree, qualifications	Disagree	Strongly disagree
1. to encourage students to take part in community dramatics activities.	SA	A	AR	NO	DQ	D	SD
2. to develop in students the capacity for moving gracefully, easily, and expressively.	SA	A	AR	NO	DQ	D	SD
3. that dramatic activities can help a student develop self-confidence.	SA	A	AR	NO	DQ	D	SD
4. to develop in students the habits of cooperation and teamwork.	SA	A	AR	NO	DQ	D	SD
5. to engage students in fulfilling and creative activities.	SA	A	AR	NO	DQ	D	SD
6. simply that students enjoy dramatic activities.	SA	A	AR	NO	DQ	D	SD
7. to stimulate interest in the theatre so that students will become regular patrons of the professional theatre when they are adults.	SA	A	AR	NO	DQ	D	SD
8. to teach students how a mature theatre-goer should behave at a play.	SA	A	AR	NO	DQ	D	SD
9. to locate student talent for school dramatic activities.	SA	A	AR	NO	DQ	D	SD
10. to bring life and movement into the classroom.	SA	A	AR	NO	DQ	D	SD
11. to help students to grow increasingly sophisticated in their selection of plays to watch and read.	SA	A	AR	NO	DQ	D	SD
12. that study of the drama can develop the students' abilities to deal critically with other forms of literature.	SA	A	AR	NO	DQ	D	SD

13. to extend the range, fluency, and effectiveness of student speech. SA A AR NO DQ D SD

14. that play acting in itself is an aesthetic experience that no young person should miss. SA A AR NO DQ D SD

15. to develop in students the ability to read a play in the way an actor or director reads it. SA A AR NO DQ D SD

16. to teach students how to interpret symbolism as used in certain types of plays. SA A AR NO DQ D SD

17. to give students a thorough understanding of the history and development of the theatre. SA A AR NO DQ D SD

18. to give students a mastery of the critical vocabulary necessary to an intelligent discussion of dramatic literature. SA A AR NO DQ D SD

19. that great dramas provide many excellent topics for composition assignments. SA A AR NO DQ D SD

20. to familiarize students with the different types of drama--tragedy, comedy, farce, melodrama, and so on. SA A AR NO DQ D SD

21. to improve the students' taste in entertainment. SA A AR NO DQ D SD

22. to acquaint the students with the technical aspects of theatrical production. SA A AR NO DQ D SD

23. to help students to learn how to become more perceptive members of the audience at a play. SA A AR NO DQ D SD

24. to give students experiences that will enable them to appreciate other great works of art. SA A AR NO DQ D SD

25. to develop in students a distaste for the cheap and shoddy and sensational in art and literature. SA A AR NO DQ D SD

26.	that such study can help students to understand European and American history more thoroughly.	SA	A	AR	NO	DQ	D	SD
27.	that dramatic activities such as improvisation are excellent preparation for creative writing assignments.	SA	A	AR	NO	DQ	D	SD
28.	that drama, and especially Shakespeare, provides a wealth of examples for study of language and linguistic change.	SA	A	AR	NO	DQ	D	SD
29.	that drama provides moral lessons from which students can learn how to better order their own lives.	SA	A	AR	NO	DQ	D	SD
30.	to give students a deeper understanding of their own motives and of human nature in general.	SA	A	AR	NO	DQ	D	SD
31.	to help students develop a philosophy of life through contact with "the best thoughts of the best minds."	SA	A	AR	NO	DQ	D	SD
32.	that, by perceiving the world through the senses of persons unlike themselves, students will develop tolerance and a deeper understanding of the human condition.	SA	A	AR	NO	DQ	D	SD

FOOTNOTES

[1] This study was published, in slightly different form, in Research in the Teaching of English (Fall, 1969), pp. 127-159.

[2] A fourth reason was to determine, by readministering the instrument a year later, whether the objectives of the groups might have become more congruent. This readministration had to be cancelled due to the teachers' strike in Los Angeles. The questionnaire was administered to a sample of students in Los Angeles in 1970, however, and a report of the results of that study follows.

[3] No actor refused to complete the questionnaire, it was simply impossible for our interviewers to get together with one or two members of each of the companies.

[4] In presenting the results of the one-way analysis of variance, in which groups' responses have been pooled across locations, we are, in effect, disclaiming a desire to generalize beyond the group populations in the areas affected by the Educational Laboratory Theatre Project. We have chosen to do this because the data do not allow us to perform a straightforward analysis of variance by groups across locations, a procedure which would have allowed us to partition location effects, given us a more conservative estimate of between-group differences, and allowed us to suggest that the contrasts that were found were indeed typical of the groups involved. But, as it happened, the schools in one of the areas simply do not have drama teachers, giving us one empty cell; and the element of chance at work in deciding whether an administrator completed the questionnaire gave us a very unequal distribution of administrators among locations, with the smallest number unfortunately occuring in the same location in which there were no drama teachers.

We were able to do a two-way analysis between English teachers and actors across the three locations. And we performed a two-way analysis of variance for all four groups across locations after estimating the missing data according to the method described in B. J. Winer, Statistical Principles in Experimental Design (New York: McGraw-Hill, 1962), pp. 281-283. The results of these analyses lead us to the opinion that the between-location effects are unimportant enough that the one-way between-groups analysis is legitimate, and, ;further, that the liberal estimate of between-group differences given by this procedure is desirable in the present case for heuristic purposes.

[5] Each of the factors now makes good sense. But, in some cases, the inclusion of items that are heavily loaded on a factor, but below the .500 cut-off point, would create difficulties of interpretation. A good instance is item 9 ("Locate talent"), which loads +.497 on Factor 1, which is otherwise composed of items having to do with "Noncognitive personal development." Similarly, the inclusion of item 28 ("Linguistics"), which loads +.475 on Factor 5 and -.487 on Factor 8 would complicate interpretation of those factors. On the other hand, there are instances in which the inclusion of a marginally loaded item would tend to strengthen our interpretation of a factor. A case in point is item 15 ("Read as an actor does"), which loads -.476 on Factor 6 and would, if included, buttress the conclusion that this factor has to do with the attainment of specifically theatrical skills.

The decision to use the .500 loading as a criterion for inclusing an item in a factor was made during the analysis of the data from the first half of the sample in June, 1968. As it turns out, the decision was a happy one, and we will stick by it while acknowledging that a somewhat different set of factors would have emerged if the criterion had been, say, .400. Additional analyses of these data are being carried out, by the way, preparatory to relating this study to the results of the experiment with methods of teaching drama. The additional analyses will include an image factor analysis to confirm the "reality" of the factors that emerged from the principal components factor analysis.

[6] It should also be noted that these "ethical growth" objectives are "internal" and long-range, so that in the vast majority of cases it will be impossible for the teacher ever to know that his efforts have contributed to the attainment of the objectives in question. This means that the teacher who says he is teaching primarily to attain ethical objectives is in the positions of (1) operating according to a blind faith which can be neither supported nor threatened by empirical evidence and (2) being quite unable to demonstrate to a skeptic any necessary connection between either his subject matter or his methods and the effects he purports to be having on his students. One in this position is likely, first, to deny that proof of the ethical efficacy of great literature is necessary, and, second, to have little patience with anyone so perverse as to ask for such proof.

What we would suggest, at least tentatively, and without singling out the English teachers for criticism (for there is ample opportunity for self-deception in regard to the attainment of most of the goals valued by the other groups), is that value differences in regard to objectives that are matters of faith and dogma are likely to be extremely disruptive of communication, since such matters of belief are deeply involved with one's perception of himself and highly loaded with affect. The practical consequences of such differences, that is to say, may be greater than the statistical differences suggest.

[7] The reader's attention is called to Siegel's warning that a "high or significant value of W does not mean that the orderings observed are correct....It is possible that a variety of judges can agree because all employ the 'wrong' criterion." Non-Parametric Statistics for the Behavioral Sciences (New York: McGraw-Hill, 1956), p. 238. For example, although all the groups rate item 9 ("Locate talent") at or near the bottom, it is possible that if the criterion was the social and psychological well-being of students recruited into school dramatics, the item would deserve a very high rating.

[8] See the discussion in Winer, op. cit., pp. 124-132.

A NOTE

The reader is hereby notified that the following study is something of an extravagance, with which it might be just as well for him not to bother, unless he has interest in fancy statistics or in an excellent illustration with which to make the point that design is of vastly greater importance than sophisticated analyses.

What happened was this. Between the time that the preceding study was completed and the following one was undertaken, we had acquired and learned how to use a number of way-out multivariate of analysis programs. They were fun to fool around with, and in some instances allowed us to learn things that less powerful analytical tools would not have revealed. When we found time to do the study of student objectives of drama, which we desired as a follow-up to the study of educator and actor objectives, only the Los Angeles student population was still available to us, and we hitched the study of student objectives to the studies of student responses to interracial casting (which are reported later), figuring that this way we could, at the same time, find out how student objectives for drama differed from adult ones, and also whether the objectives of black students differed from those of white students.

In the effort to reduce the sample size, so as to minimize our disruptions of the schedule in the schools that were cooperating with us, we chose one class at each ability level in each school, simply as a way to assure that the whole range of student abilities were represented in our sample. This was fine; but when we came to analyzing the data, we exceeded the design and used ability level as an independent variable, simply because it was as easy to include it as not to.

So, of course, as the report explains, what happened was that the most interesting findings of the study were those involving interactions between ability level and the other independent variables. But, strictly, these interactions were uninterpretable, since ability level differences were confounded with teacher and classroom group differences. So, for the most part, what came out of the study was (1) a series of intriguing hypotheses to be investigated later and (2) sore toes on both authors contracted in the process of kicking themselves.

Even further, we found that we had outsmarted ourselves in our choice of analyses, since readers who had been perfectly happy with the preceding study now did not understand what we were doing or why we were doing it. The use of factor scores in an ANOVA had been urged on us, in the course of an earlier study, by a distinguished statistician who probably would prefer not to be named in this context, and we seized

the present opportunity to try out using factor scores in a MANOVA. The people with whom we wanted to communicate have found the report, consequently, an exercise in jargon or a parable in pidjin and have become angered at us. So warned, you may read the report or skip over it and go on to the better things.

STUDENTS' OBJECTIVES FOR DRAMA IN THE SECONDARY SCHOOL

James Hoetker and Richard Robb

Introduction

The previous study concluded that the "Objectives for Drama" instrument discriminated between the groups involved and that the differences between the groups made sense and revealed something about how the various groups conceived of their professional responsibilities.

In the preceding study, it was explained that only adults had been included in the sample because "we feared that the inclusion of a sample of students, many of whom would probably not have opinions on the subject,... would greatly reduce our chances of finding conceptually meaningful factors." Subsequently, the "Objectives for Drama" instrument was given to several hundred students, and it turned out that our fears were completely unfounded. Not only were the students' objectives well structured, they were discriminably different from those of the adults who responded in the earlier study. In addition, the objectives held by students at different sorts of schools were discriminably different from one another.

The Subjects

The instrument was administered in the four "representative" schools which were taking part in the studies on responses to interracial theatre which are reported later in this volume. For the purposes of reporting the studies, the four schools are given ficticious names: Los Altos, Central, John L. Lewis, and Langston Hughes. Los Altos serves the children of very well-to-do suburban whites. Central is a middle to lower-middle class school, about half-white but with a large representation of Oriental, Chicano, and black students. Lewis has a virtually all-white student body from homes in which the father is likely to be a skilled laborer and union member or a white collar worker in a non-executive position. Hughes has an entirely black student body, and many of the students' parents are unskilled workers or receive public assistance.

In each of these "representative" schools, three classes were chosen to take part in the study. The selection was made by choosing at random from a list of twelfth grade English classes, one class at each of three ability levels--high, average, and low.

Usable responses (i.e., all items rated, all personal information given) were obtained from 55 students at Los Altos, 69 at Central, 66 at Lewis, and 44 at Hughes, a total of 234 subjects.

For purposes of comparing student and adult ratings, the responses obtained earlier from English teachers and professional actors in Los Angeles were used. The adult group consisted of 28 English teachers and 24 actors.

The "Objectives for Drama" Instrument

The making of this instrument was fully described in the article referred to previously. Briefly, the instrument (a copy of which is appended to this report) asks respondents to rate the importance of each of 32 objectives for the teaching of drama on a seven-point scale. The adult version of the questionnaire had contained verbal definitions for the seven points on the rating scale, phrased from the point of view of a teacher or curriculum-maker. For the purposes of this study, we re-wrote the instructions and defined the seven points simply as running from "strongly agree" to "strongly disagree." We felt that giving the students the task of rating from an adult's point of view would give us a disproportionate number of "no opinion" responses and have a more adverse effect upon the comparability of responses than would the re-definition of the points on the scale.

Analyses of the Data

Multiple discriminant function analyses of the data from, first, the adults and students, and, then, from the students in the four schools, were carried out to see whether responses from the various groups were discriminably different. Then factor analysis and multivariate analysis of variance were used, in conjunction with one another, in an attempt to refine our understanding of the differences between students at the four schools.

Discriminant Analyses

Linear multiple discriminant function analyses were used, first, to classify responses of the 234 students and 52 Los Angeles adult respondents (who had filled out the questionnaire a year earlier) and, second, to classify the responses of students from the different schools. Adults' responses were found to be significantly different from the students', largely because the adults tended to give higher mean ratings to almost all items.

	Statistically Derived Groups	
	1	2
Students	206	28
Adults	6	46

More interestingly, the four schools were well-discriminated according to their responses on the "Objectives for Drama" instrument, as shown in the following table.

	Statistically Derived Groups				
School Name	1	2	3	4	%
Los Altos	53.5	13.7	20.7	12.1	100.0
Lewis	19.1	48.5	19.1	13.2	99.9
Central	15.1	12.3	56.2	16.4	100.0
Hughes	11.5	13.5	11.5	63.5	100.0

The approximate F-ratio, with all variables entered, and with 96 and 648 degrees of freedom, was 1.36, which is significant between the .01 and .05 levels.

First MANOVA

Using school, sex, and ability as the independent variables, and amount of theatre experience as a covariate, a 4 x 2 x 3 multivariate analysis of variance of the scores on all 32 items was carried out. Significant school ($P < .03$) and ability ($P < .007$) main effects were found, while sex effects and all interactions were nonsignificant. For the school effects, univariate F-ratios reached significance at the .05 level for 13 of the 32 items, and for the ability effects, ten of the univariate Fs were significant.

Factor Analysis

In the attempt to better understand the dimensions along which students differed, a principal components factor analysis was done, factor scores were computed from the rotated factor loadings, and a MANOVA of individual factor scores on these new variables was carried out.

The factor analysis yielded nine factors with eigenvalues greater than 1.0. After a varimax rotation of the factors, it was found that the first five, which together accounted for about 46% of the total variance, were conceptually meaningful, while the sixth through ninth factors were somewhat less coherent. It was decided to give further attention only to the first five factors.[1] Table 1 gives the loadings for these five factors.

Insert Table 1 Here

In constructing the "Objectives for Drama" instrument, several hundred statements of objectives had been sorted into eight *a priori* categories. Using a table of random numbers, four items from each of the categories was chosen for inclusion in the questionnaire. In Table 2, the eight *a priori* categories are compared with the five factors, with the criterion for the inclusion of an item on a factor being a loading which rounds to .5 or higher.

Insert Table 2 Here

It will be seen that, in the cases of the second through fifth factors, there is a good correspondence between the *a priori* categories and the factors, while the first factor cuts across a number of the *a priori* categories. The items loading .5 or higher on each of the five factors are listed below, and the nature of each of the factors is discussed.[2]

Factor 1. Instrumental Utility of Drama

The items loading highly on this first factor are the following:

12. that study of the drama can develop the students' abilities to deal critically with other forms of literature.

16. to teach students how to interpret symbolism as used in certain types of plays.

20. to familiarize students with the different types of drama--tragedy, comedy, farce, melodrama, and so on.

TABLE 1. Rotated Factor Loadings

on First Five Factors

Item	Factor 1	2	3	4	5
1	.148	.101	.059	.418	-.002
2	.104	.604	.022	.191	.062
3	.009	.786	.064	.047	.179
4	.067	.757	.255	-.022	.123
5	.189	.642	-.131	-.031	.073
6	.417	.240	-.072	.387	-.204
7	.269	-.010	.024	.653	.079
8	-.099	-.069	.144	.721	.190
9	-.015	.225	.120	.655	-.032
10	-.080	.130	.079	.041	.276
11	.371	-.017	.067	.149	-.009
12	.709	.131	.186	.099	.133
13	.109	.437	.270	.198	.241
14	.169	.108	.014	.013	.146
15	.018	.102	.252	.195	.170
16	.465	-.014	.194	-.067	.300
17	.138	.012	.778	.009	.076
18	.263	.104	.727	.077	.088
19	.307	.142	.489	.115	.224
20	.472	.027	.149	-.040	.073
21	.229	-.005	.107	-.002	.068
22	-.036	.174	.564	.155	-.039
23	.295	.142	-.030	.189	.224
24	.502	.151	.144	.020	.157
25	-.090	.053	.170	.166	.106
26	-.163	.054	.463	.216	.329
27	.140	.155	.479	.026	.065
28	.480	.140	.231	.042	.204
29	.109	.244	.317	-.003	.593
30	.270	.322	.031	-.101	.647
31	-.065	.004	.062	.200	.683
32	.230	.191	.075	.089	.677
% of Variance	23.80	6.32	5.87	5.31	4.56

TABLE 2. Comparison of A Priori

Categories with First Five Factors

A Priori Category Titles	Item Number	Key Words	Factors 1	2	3	4	5
1 Intrinsic value	5	fulfillment		.642			
	6	simply enjoy					
	10	life in classrooms					
	14	aesthetic experience					
2 Drama and literary knowledge	17	history of theatre			.779		
	18	vocabulary			.727		
	20	types of drama	.472				
	22	technical knowledge			.564		
3 Literary skills	12	critical skill	.709				
	15	read as actor does					
	16	symbolism	.465				
	23	perceptive audience					
4 Appreciation and taste	11	taste in plays					
	21	taste in entertainment					
	24	appreciate art	.502				
	25	distaste for bad					
5 Ethical growth	29	moral lessons					.593
	30	understand self					.647
	31	philosophy of life					.683
	32	tolerance					.677
6 Personal and social benefits	2	move gracefully		.604			
	3	self-confidence		.786			
	4	cooperation		.757			
	13	fluent speech					
7 Benefits to theatre and arts	1	community dramatics					
	7	theatre goers			.653		
	8	behave at play			.721		
	9	locate talent			.655		
8 Curricular usefulness	19	composition			.489		
	26	teach history			.463		
	27	creative writing			.479		
	28	linguistics	.480				

24. to give students experiences that will enable them to appreciate other great works of art.

28. that drama, and especially Shakespeare, provides a wealth of examples for study of language and linguistic change.

What these items seem to have in common is the element of usefulness, of drama considered as a means to some academic end.

Factor 2. Noncognitive Personal Development Through Drama

These items, as listed below, all deal with personal improvements contingent upon active participation in dramatic activities, as opposed to the study of drama as literature or to attendance at performances of plays. (Item 13, the fourth item from a priori category 6, "Personal Benefits," loads .437 on this factor, strengthening our interpretation of it.)

2. to develop in students the capacity for moving gracefully, easily and expressively.

3. that dramatic activities can help a student develop self-confidence.

4. to develop in students the habits of co-operation and teamwork.

5. to engage students in fulfilling and creative activities.

Factor 3. Acquisition and Demonstration of Knowledge

This factor is a combination of two of the a priori categories--"Dramatic and Literary Knowledge" and "Curricular Usefulness," perhaps indicating that, to students, the acquisition of testable knowledge is conceptually inseparable from practicing and exhibiting that knowledge.

17. to give students a thorough understanding of the history and development of the theatre.

18. to give students a mastery of the critical vocabulary necessary to an intelligent discussion of dramatic literature.

19. that great dramas provide many excellent topics for composition assignments.

22. to acquaint the students with the technical aspects of theatrical production.

26. that such study can help students to understand European and American history more thoroughly.

27. that dramatic activities such as improvisation are excellent preparation for creative writing assignments.

Factor 4. Benefits to the Theatre

The three items loading on this factor are all from the same a priori category and have to do with the rather narrow objective of turning drama instruction to the benefit of theatre programs. Item 1, the fourth item in the a priori category, it will be noted from Table 1, loads .418 on this factor, while the loadings of all other items are very low.

7. to stimulate interest in the theatre so that students will become regular patrons of the professional theatre when they are adults.

8. to teach students how a mature theatre-goer should behave at a play.

9. to locate student talent for school dramatic activities.

Factor 5. Ethical Growth

The four items on this factor are the same as the four in the a priori category number 5, and they all have to do, not with drama specifically, but with the "ultimate" moral and ethical objectives of a liberal education.

29. that drama provides moral lessons from which students can learn how to better order their own lives.

30. to give students a deeper understanding of their own motives and of human nature in general.

31. to help students develop a philosophy of life through contact with "the best thoughts of the best minds."

32. that, by perceiving the world through the senses of persons unlike themselves, students will develop tolerance and a deeper understanding of the human condition.

MANOVA of Factor Scores

Considering each of the five factors as a new dependent variable. factor scores for each respondent on each of the factors were computed, and a MANOVA of the factor scores was conducted, schools by sex by ability, with the amount of theatre experience as a covariate.

The design matrix and the structure of contrasts for the MANOVA are given in Tables 3 and 4, respectively. The hypothesis that scores on the five factors were independent of the amount of experience with interracial theatre (the coveriate) could not be rejected ($F_{5,205} = 0.60$; $P < .70$), but the mean scores reported below have been adjusted by eliminating variation due to play experience.

Insert Tables 3 and 4 Here

The results of the MANOVA may be summarized as follows: school and ability level main effects were significant at the .05 confidence level, as were the ability by sex and school by ability interactions; the sex main effects and all other interactions were nonsignificant. For each of the significant effects, the F-ratio for the multivariate test of the equality of mean vectors and the step-down F-ratios for each factor will be reported; the mean factor scores will be reported in those cases where the step-down F-ratio attains significance at the .05 level or beyond.

TABLE 3. Design Matrix for the "Objectives for Drama" Study

Condition	Levels of the Independent Variables: School	Ability	Sex	Number of Students
1	1	-1	1	14
2	1	-1	-1	9
3	1	0	1	14
4	1	0	-1	13
5	1	1	1	6
6	1	1	-1	13
7	2	-1	1	6
8	2	-1	-1	6
9	2	0	1	10
10	2	0	-1	11
11	2	1	1	5
12	2	1	-1	6
13	-1	-1	1	11
14	-1	-1	-1	5
15	-1	0	1	12
16	-1	0	-1	10
17	-1	1	1	6
18	-1	1	-1	11
19	-2	-1	1	13
20	-2	-1	-1	9
21	-2	0	1	13
22	-2	0	-1	10
23	-2	1	1	11
24	-2	1	-1	10
				N = 234

TABLE 4. Structure of Orthogonal Contrasts for the MANOVA of Factor Scores

Factor Name	Contrast (Code Designation): INSU	NCPD	ACQK	BENT	ETHG
Instrumental Utility	1	0	0	0	0
Noncognitive Development	0	1	0	0	0
Knowledge	0	0	1	0	0
Benefit to Theatre	0	0	0	1	0
Ethical Growth	0	0	0	0	1

Table 5 presents the hypothesis mean squares and step-down F-ratios for the evaluation of ability level effects. The F-ratio for the multivariate test of equality of mean vectors is given at the bottom of this table (and the succeeding tables).

Insert Table 5 Here

As a function of ability level, the students differed in their ratings of items in the Instrumental Utility and Knowledge factors. The mean factor scores, given below, show that the high ability students rated the Instrumental Utility factor items more highly than the low ability students, while the average ability students rated these items lower than either of the other two groups. On the knowledge factor, however, it was the low ability students who gave the highest ratings and the high ability students the lowest.

TABLE 6. Mean Factor Scores by Ability Level

for the Instrumental Utility and Knowledge Factors

Ability Level	Inst. Utility	Knowledge
Low	+ .056	+ .339
Average	- .192	- .144
High	+ .227	- .178

It is interesting that the low ability students would be the ones to rate most highly the acquisition and demonstration of knowledge, but further discussion will be deferred until the interactions of ability with the other independent variables have been examined.

Table 7 summarizes the MANOVA for school effects. Between-school differences are most notable in the cases of the Knowledge and Benefits to Theatre factors. The school means on these two factors are summarized in Table 8.

Insert Table 7 Here

TABLE 5. Summary of Results of the MANOVA for the Hypothesis that the Ability Level of the Students Affects Factor Scores

Factor Name	Mean Square	Step-down F	P<
Instrumental Utility	4.89	5.20	.01
Noncognitive Development	0.08	0.15	.86
Knowledge	5.54	6.05	.003
Benefit to Theatre	1.01	1.33	.27
Ethical Growth	0.09	0.13	.87

$F_{10,410} = 2.56$; $P < .005$

TABLE 7. Summary of Results of the MANOVA for the Hypothesis that School Characteristics Affect Factor Scores

Factor Name	Mean Square	Step-down F	P<
Instrumental Utility	0.79	0.84	.48
Noncognitive Development	0.03	0.02	.99
Knowledge	3.29	3.59	.01
Benefit to Theatre	3.82	4.22	.01
Ethical Growth	0.48	0.49	.70

$F_{15,567} = 1.81$; $P < .03$

TABLE 8. Mean Factor Scores by Schools

for the Knowledge and Benefit to Theatre Factors

School Name	Knowledge	Benefit to Theatre
Los Altos	- .045	+ .122
Central	- .261	- .105
Lewis	- .045	- .278
Hughes	+ .372	+ .412

The black students at Hughes are clearly differentiated from the students at the other three schools by their high ratings of items having to do with the acquisition and demonstration of knowledge; similarly, the same students have a higher opinion than others of objectives which involve practical benefits to amateur and professional theatre programs. Interestingly, the upper-middle class white students at Los Altos also tended to value the Benefit to Theatre factor positively, while the working class white students at Lewis valued them little.

Table 9 summarizes the MANOVA for the ability level by sex interaction.

Insert Table 9 Here

The step-down F-ratios for the Noncognitive Personal Development and Ethical Growth factors are significant at the .05 level. Table 10 gives the mean scores for the first of these factors, and Figure 1 presents them graphically, to make the nature of the interaction clearer.

TABLE 9. Summary of Results of the MANOVA for the Hypothesis that the Interaction of Sex and Ability Level Affects Factor Scores

Factor Name	Mean Square	Step-down F	P<
Instrumental Utility	2.43	2.59	0.07
Noncognitive Development	3.03	3.30	0.04
Knowledge	1.15	1.15	0.32
Benefit to Theatre	0.24	0.23	0.79
Ethical Growth	2.85	3.05	0.05

$F_{10,410} = 2.06$; $P < .03$

TABLE 10. Mean Factor Scores for Boys and Girls at Three Ability Levels on the Noncognitive Personal Development Factor

Sex	Ability Level		
	Low	Average	High
Male	- .117	- .287	+ .167
Female	+ .910	+ .287	- .131

Insert Figure 1 Here

Since this study was undertaken primarily to describe between-school (i.e., racial and socioeconomic) differences, the sample is unfortunately of such a nature that it is difficult to interpret differences between ability levels. First of all, ability level effects are confounded with teacher and class-characteristics effects; second, the ability level labels do not have the same meanings in the different schools--to judge by the verbal intelligence data we have available, for instance, a high ability class at Hughes is more comparable to an average ability class at Los Altos than to a high ability class at the latter school. Nevertheless, it is interesting to note that the relationships between ability groups in ratings on the Noncognitive Personal Development factor are quite different for boys and for girls. Endeavoring to tease out the significance of these particular differences, however, would lead us deep into the territory claimed by the sociologist of education, and would not be very fruitful, in view of the uncertainties about generalizing the observed ability level differences.

Table 11 gives the means by sex and ability level for the Ethical Growth factor, and Figure 2 gives the same information in graphic form. The items on this factor, it should be noted, were ones which most clearly discriminated the English teachers from the actors and other educators in the previous study using the "Objectives for Drama" instrument, with the English teachers rating these items significantly higher than the others.

Figure 1. Plot of Scores on the Noncognitive Personal Development Factor for Boys and Girls at Three Ability Levels

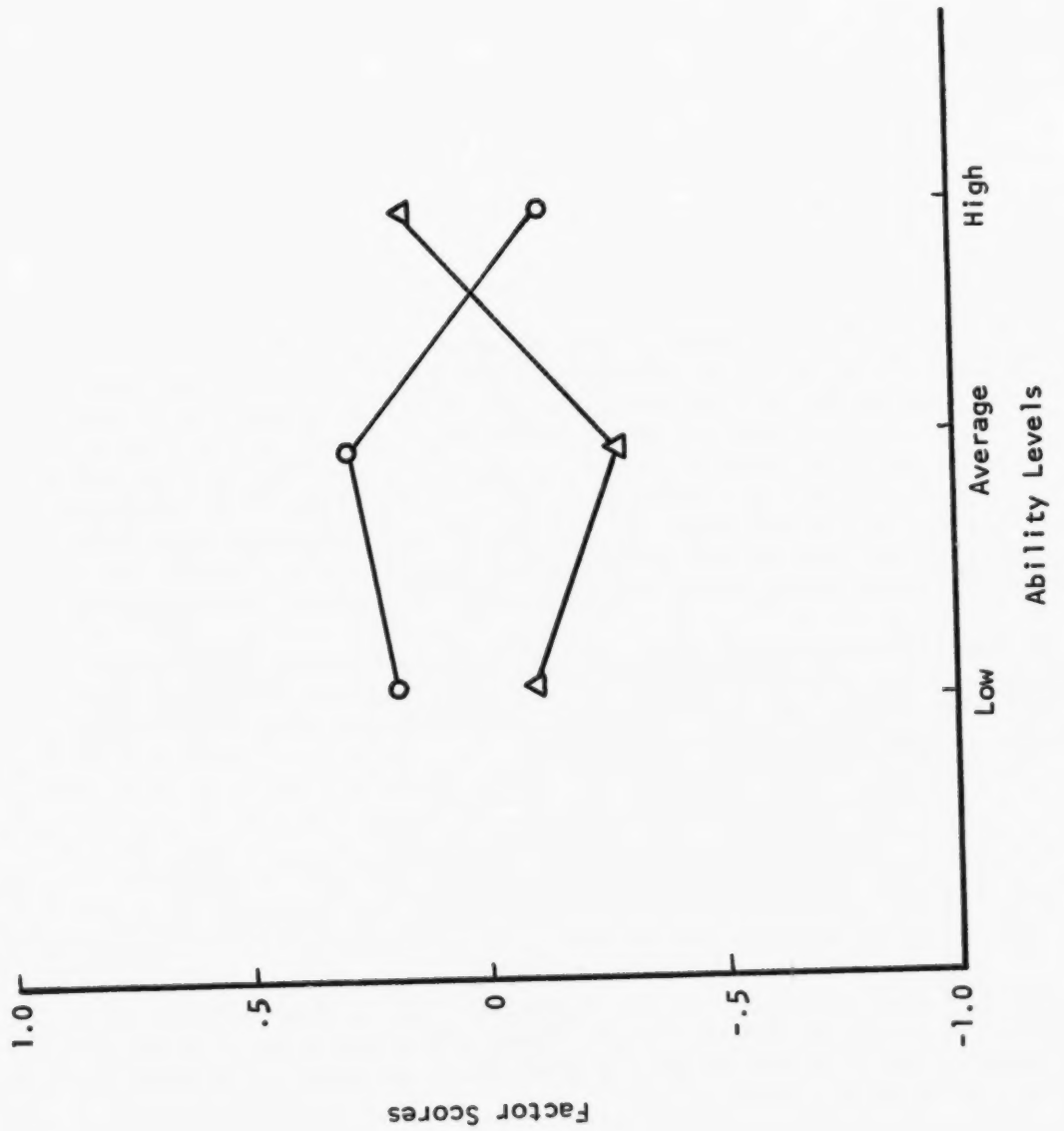


TABLE 11. Mean Factor Scores for Boys and Girls at Three Ability Levels on the Ethical Growth Factor

Sex	Ability Level		
	Low	Average	High
Male	+ .218	- .144	+ .169
Female	- .191	+ .100	- .107

Insert Figure 2 Here

As was the case with the Noncognitive Personal Development factor, the relationships between the ratings by different ability levels are precisely the opposite for boys and for girls. And in each case, the high and low ability students resemble one another, while the ratings of the average ability students are discrepant. (Ability and sex main effects on both the factors were non-significant, it will be recalled.) The consistency of the patterns on the two factors suggests that the sex by ability interaction has some real and possibly important influence on opinions about drama teaching that are worth investigating.

Table 12 shows that the school by ability interaction is significant in two cases: the Instrumental Utility factor and the Knowledge factor. Both the school and ability level main effects were significant for the Instrumental Utility factor.

Insert Table 12 Here

The items loading highly on the Instrumental Utility factor have in common that they answer the question, "What practical use is it to study drama?" Table 13 and Figure 3 give the mean scores for each ability group in each school.

Figure 2. Plot of Scores on the Ethical Growth Factor for Boys and Girls at Three Ability Levels

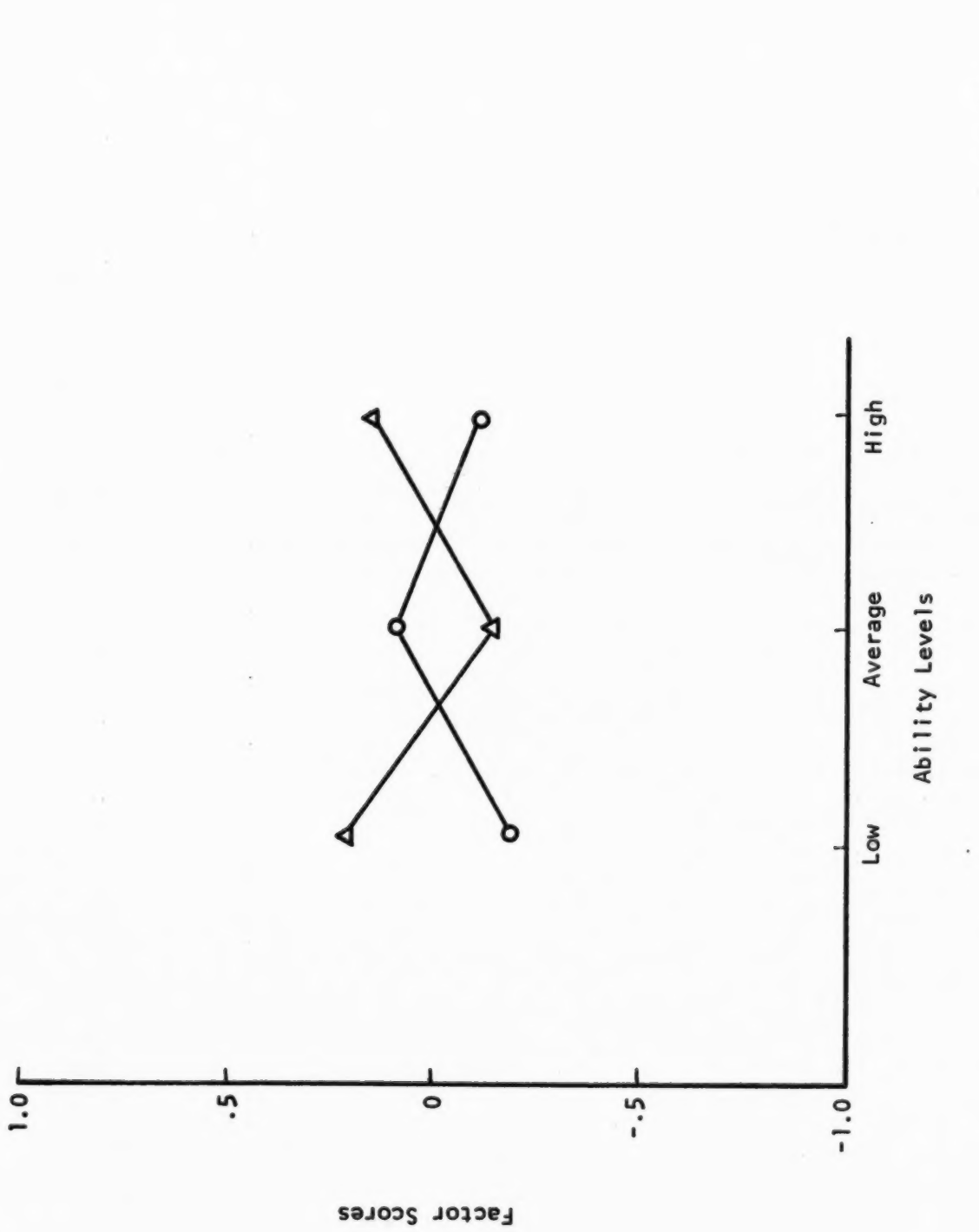


TABLE 12. Summary of the Results of the MANOVA for the Hypothesis that the Interaction of Schools and Ability Levels Affects Factor Scores

Factor Name	Mean Square	Step-down F	P<
Instrumental Utility	2.16	2.30	0.04
Noncognitive Development	0.30	0.37	0.90
Knowledge	1.99	2.17	0.05
Benefit to Theatre	1.50	1.61	0.15
Ethical Growth	1.88	1.92	0.08

$F_{30,822} = 1.67; P < .02$

TABLE 13. Mean Factor Scores on the Instrumental Utility Factor for Three Ability Levels in Four Schools

School Name	Ability Level		
	Low	Average	High
Los Altos	+ .245	- .038	+ .581
Central	+ .094	- .436	+ .486
Lewis	- .314	- .153	+ .455
Hughes	+ .201	- .142	- .613

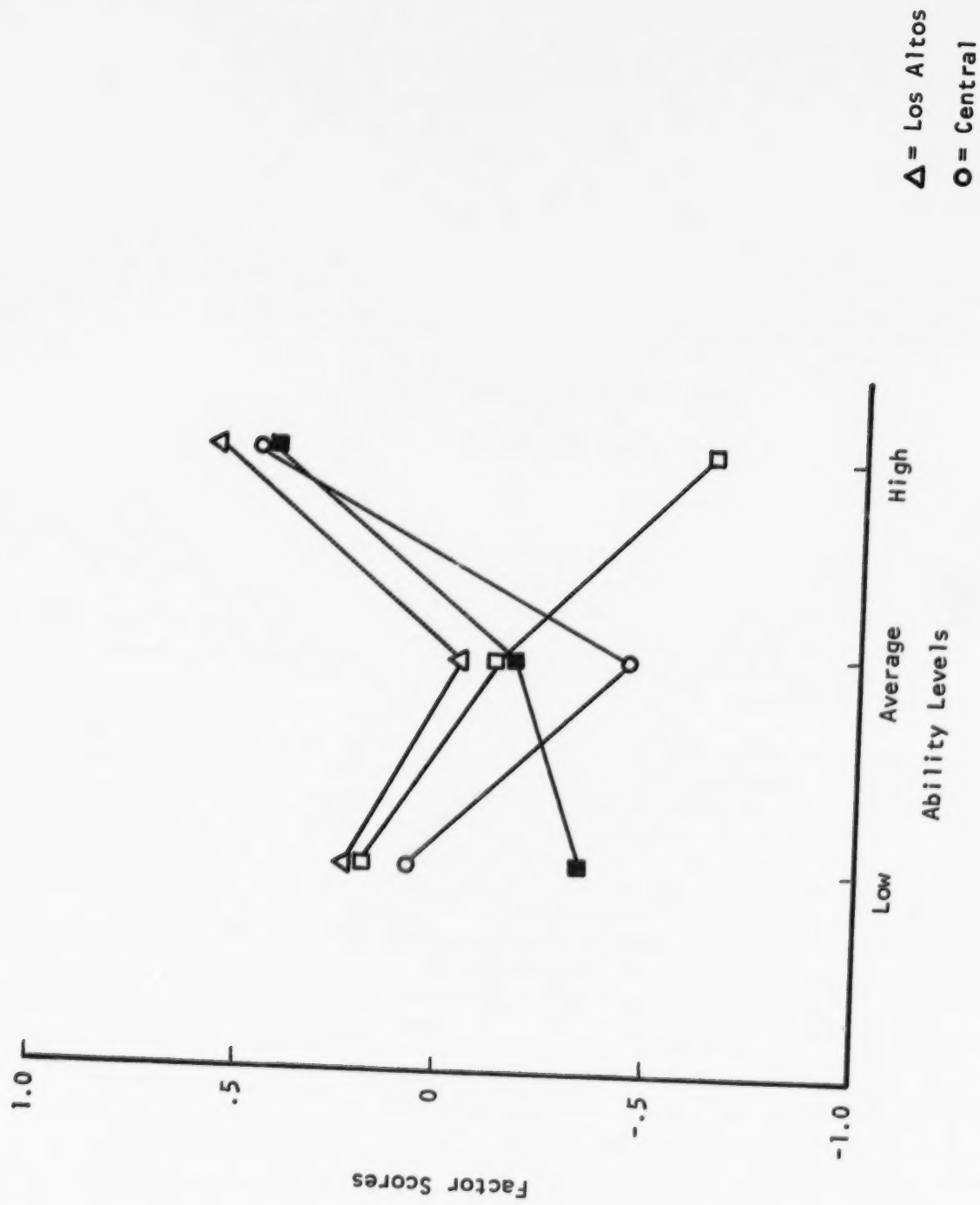
Insert Figure 3 Here

Earlier, it was shown that high ability students rated the Instrumental Utility factor most highly, with average ability students giving it the lowest ratings. The mean scores for the four schools on this factor were, from highest to lowest, Los Altos = + .290, Central = + .018, Lewis = - .015, and Hughes = - .172, the differences between schools being non-significant.

The pattern describing the significant interaction in Figure 3 is complex but interpretable. The relationships between ability levels for Los Altos and Central High Schools are those found in the analysis of the ability level main effects. But in the all-white working class school, Lewis, ratings on this factor increase with increasing ability, while at Hughes, the all-black school, the opposite is true, and ratings decline with increasing ability. The high ability black students, it is striking to note, resemble no one else in their ratings on this factor, while the low and average ability black students' ratings are almost indistinguishable from those given by the corresponding groups at Los Altos and little different from those given by the Central students.

The low ability students at Lewis are almost as notable in their departure from the prevailing pattern as the high ability students at Hughes. The departure of these two particular groups from an otherwise rather consistent pattern is a finding that seems to be loaded

Figure 3. Plot of Scores on the Instrumental Utility Factor for Three Ability Levels in Four Schools



with sociological significance; and we can now only wish that we had designed the study in such a way that we could speak with more confidence about the ability level effects. But, as it stands, the finding simply poses a question to be investigated in a future study.

The significant school by ability level effect on the Knowledge factor also has its intriguing aspects, but, again, it will be more responsible for us not to go very far beyond the data, leaving investigation of the complex relationships to future studies. The means for the ability levels in each school are given in Table 14 and, graphically, in Figure 4.

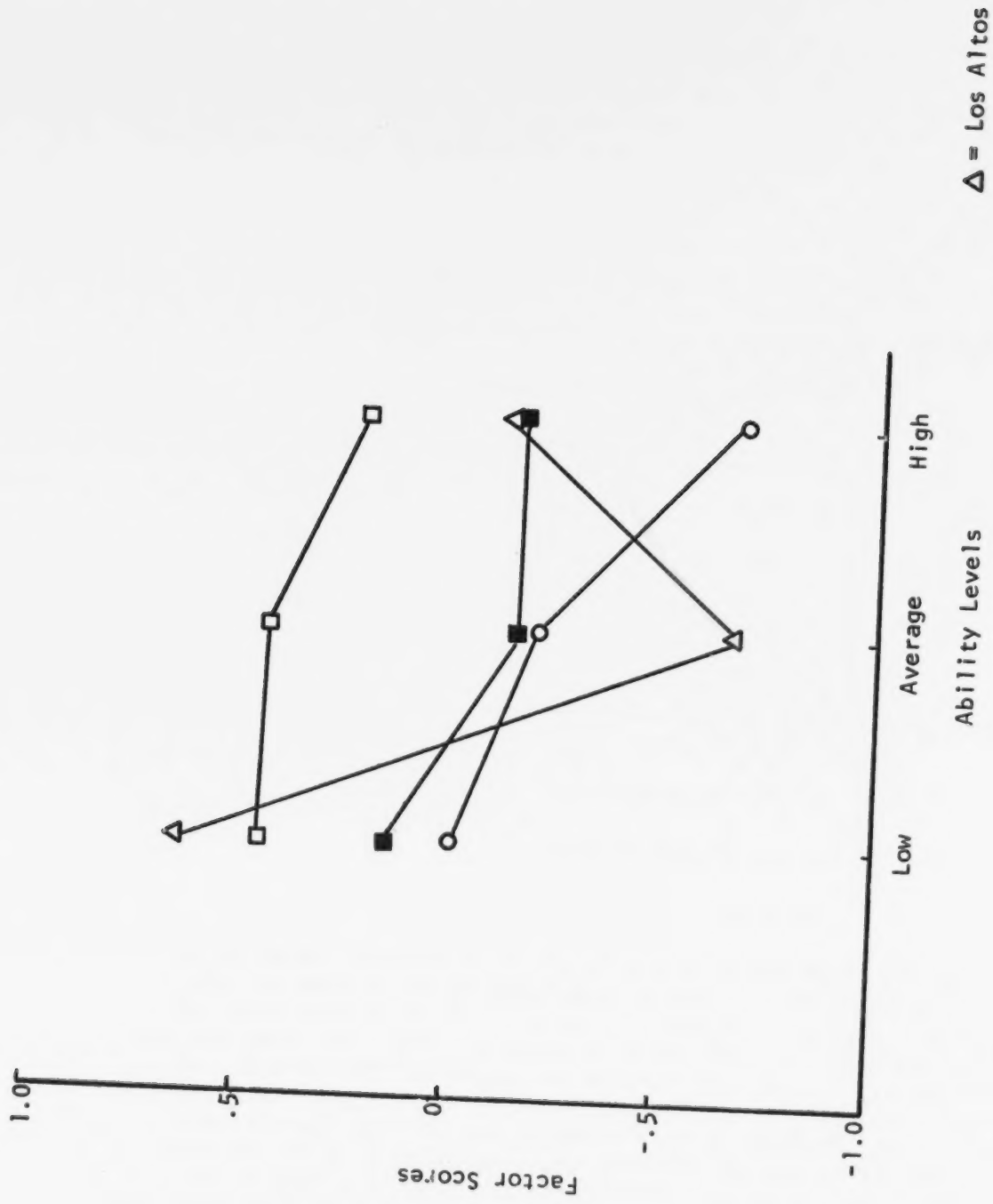
TABLE 14. Mean Factor Scores on the Knowledge Factor for Three Ability Levels at Four Schools

	Ability Level		
School Name	Low	Average	High
Los Altos	+ .653	- .673	- .107
Central	+ .010	- .200	- .682
Lewis	+ .152	- .141	- .144
Hughes	+ .452	+ .440	+ .222

Insert Figure 4 Here

Three of the six items loading highly on the Knowledge factor have to do with the acquisition of factual knowledge as an outcome of the study of drama; the other three have to do with using the study of drama as an occasion to practice or demonstrate the knowledge one has gained. Just on the basis of our own knowledge of the schools, we would have predicted that such items would be most highly rated by low ability students, because in most schools low ability students are allowed to do little except memorize and regurgitate facts, so they might naturally have come to consider memorization and testing as synonymous with education. On the same ground, we would have predicted that the high ability students, who are at least sometimes allowed to exercise judgment and autonomy, would rate other objectives higher than knowledge and therefore give lower ratings on the Knowledge factor than low ability students. We would not have been able to predict with any confidence how the average ability students would rate Knowledge items.

Figure 4. Plot of Scores on the Knowledge Factor for Three Ability Levels in Four Schools



Since, as has already been noted, the ability distributions in the different schools were not comparable, we would, following the same reasoning as above, have predicted that the Knowledge items would be rated higher by Hughes students than by Los Altos students, and we would have hesitated to predict the ratings that would be given by students at the other two schools.

Examination of Figure 4 shows that the low ability students in all four schools did rate the Knowledge items somewhat higher than they were rated by high ability students, and that the Hughes students did indeed rate these items more highly than students in the other schools. But, and this is the anomaly that helps account for the significant interaction, the low ability students at Los Altos rated the Knowledge factor even higher than the low ability students at Hughes, while the Los Altos average ability students gave it ratings so low as to amount to a denial that such objectives had any importance at all. (The even lower ratings given the factor by the high ability students at Central are less striking only because those ratings are less discrepant from those given by the other students at the school.)

To summarize the description, school main effects were significant largely because the Hughes students generally rated the Knowledge objectives higher than the other schools; the ability level main effects were significant largely because the low ability students consistently rated these objectives higher than the high ability students; and the interaction was significant due to (1) the pattern of the large differences in ratings between ability groups at Los Altos and (2) the similarity of average and high ability ratings at Lewis (in a situation where, at Central and Hughes, low and average ability ratings were similar).

The questions these findings raise deserve to be investigated: Why do low ability students rate the Knowledge objectives more highly than other students? Why do students at the black school rate them generally more highly than other students? Why are the ratings between ability levels at the black school so similar while those at the high SES white school are so different? To the extent that the ratings are reflections of values learned in schools, these are basic questions about the educational experiences offered different types of students.

FOOTNOTES

[1] The factors that were discarded, insofar as further analyses were concerned, were not all uninterpretable, by any means. But they were weak factors, in the sense of containing few items, and they accounted for relatively little of the variance. The sixth through ninth factors are summarized in the table below.

Factor No.	Items	Loadings	% Var.
6	10	.704	3.71
	11	.463	
	28	.528	
7	21	.714	3.48
	25	.787	
8	14	.663	3.22
	15	.690	
9	20	.502	3.07
	22	.450	
	23	.646	

[2] The .5 criterion for inclusion in a factor was decided upon during the earlier study of adult objectives for drama. A relaxing of the criterion to .400 would, in the present case, lead to the inclusion of item 6--"simply that students enjoy dramatic activities"--in the first factor, which we have identified as having to do with the "Instrumental Utility of Drama." It might be possible to conceive of students considering enjoyment as a practical outcome of instruction, but it would take some stretching, and it is perhaps best to consider the high loading as an uninterpretable component of a factor that otherwise makes good sense. The matter is brought up at all because of the role played by high loadings in the computation of the factor scores. There are two other cases in the present data in which the inclusion of items loading .400 or higher would strengthen the interpretation given to the factor. Both these instances are noted in the text.

Appendix: "Objectives for Drama" Questionnaire

CEMREL, Inc.

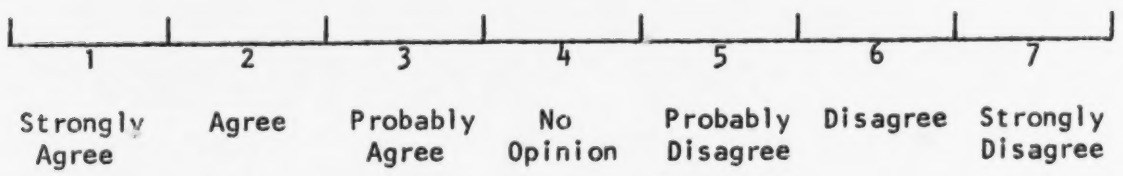
NAME OF YOUR SCHOOL_____

YOUR ENGLISH TEACHER'S NAME_____

YOUR GRADE (circle one) 10 11 12 YOUR SEX (circle one) M F

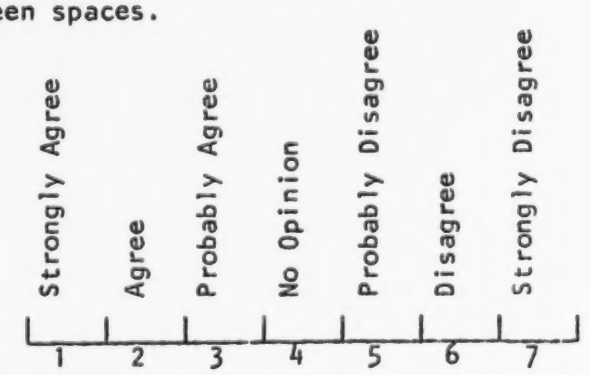
Below are 32 statements. Each expresses a reason why drama should be taught in high school English classes. We have previously asked teachers and actors to tell us how they feel about each statement, and now we are asking students to do the same.

Read each statement and record your reaction to it by marking an X in one of the spaces on the scale to the right of the question. Each space indicates a degree of agreement or disagreement with the statement, with the first space to the left indicating strong agreement, as follows:



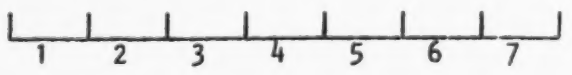
Mark in the space, not on the divider between spaces.

AN IMPORTANT REASON FOR INCLUDING THE DRAMA IN A HIGH SCHOOL ENGLISH CLASS IS:

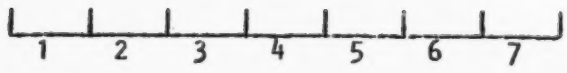


1. to encourage students to take part in community dramatics activities.

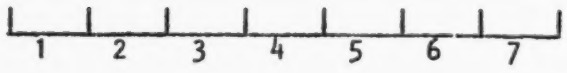
2. to develop in students the capacity for moving gracefully, easily, and expressively.



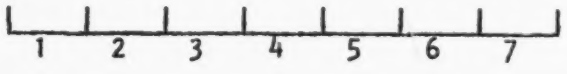
3. that dramatic activities can help a student develop self-confidence.



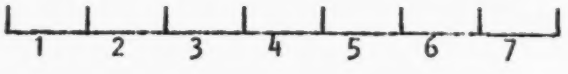
4. to develop in students the habits of cooperation and teamwork.



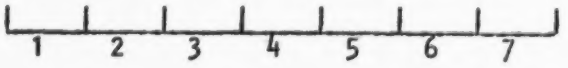
5. to engage students in fulfilling and creative activities.



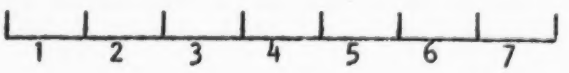
6. simply that students enjoy dramatic activities.



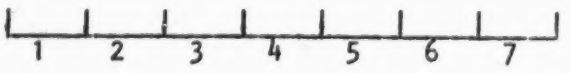
7. to stimulate interest in the theatre so that students will become regular patrons of the professional theatre when they are adults.



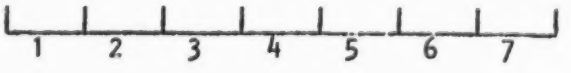
8. to teach students how a mature theatre-goer should behave at a play.



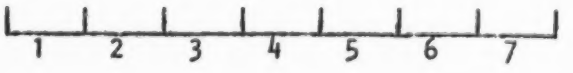
9. to locate student talent for school dramatic activities.



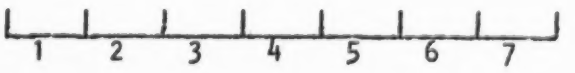
10. to bring life and movement into the classroom.



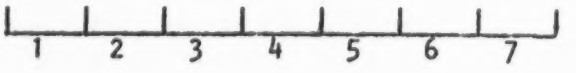
11. to help students to grow increasingly sophisticated in their selection of plays to watch and read.



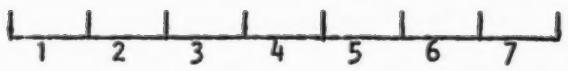
12. that study of the drama can develop the students' abilities to deal critically with other forms of literature.



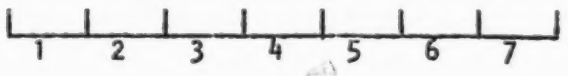
13. to extend the range, fluency, and effectiveness of student speech.



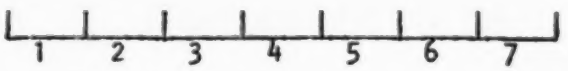
14. that play acting in itself is an aesthetic experience that no young person should miss.



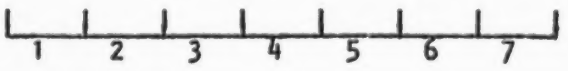
15. to develop in students the ability to read a play in the way an actor or director reads it.



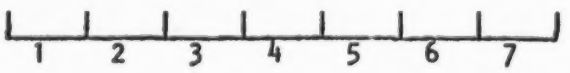
16. to teach students how to interpret symbolism as used in certain types of plays.



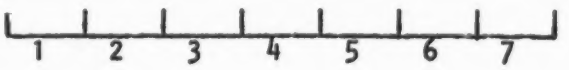
17. to give students a thorough understanding of the history and development of the theatre.



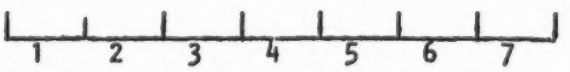
18. to give students a mastery of the critical vocabulary necessary to an intelligent discussion of dramatic literature.



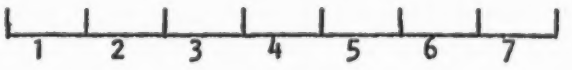
19. that great dramas provide many excellent topics for composition assignments.



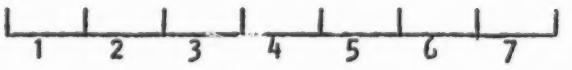
20. to familiarize students with the different types of drama--tragedy, comedy, farce, melodrama, and so on.



21. to improve the students' taste in entertainment.

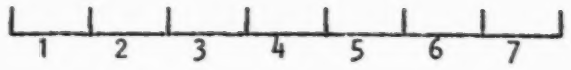


22. to acquaint the students with the technical aspects of theatrical production.

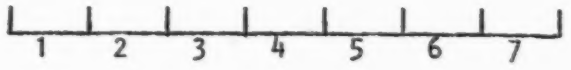


23. to help students to learn how to become more perceptive members of the audience at a play.

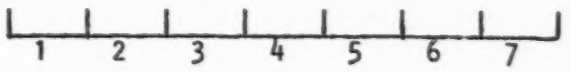
24. to give students experiences that will enable them to appreciate other great works of art.



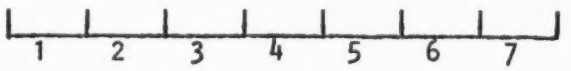
25. to develop in students a distaste for the cheap and shoddy and sensational in art and literature.



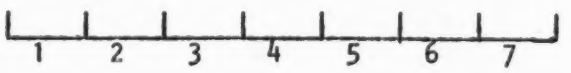
26. that such study can help students to understand European and American history more thoroughly.



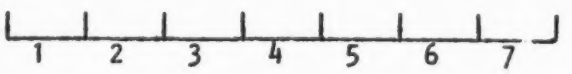
27. that dramatic activities such as improvisation are excellent preparation for creative writing assignments.



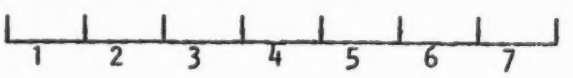
28. that drama, and especially Shakespeare, provides a wealth of examples for study of language and linguistic change.



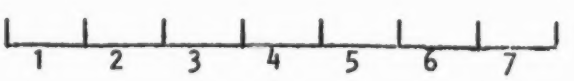
29. that drama provides moral lessons from which students can learn how to better order their own lives.



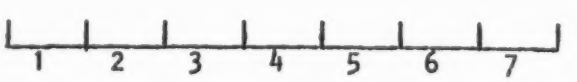
30. to give students a deeper understanding of their own motives and of human nature in general.



31. to help students develop a philosophy of life through contact with "the best thoughts of the best minds."



32. that, by perceiving the world through the senses of persons unlike themselves, students will develop tolerance and a deeper understanding of the human condition.



SUMMARY OF THE EXPERIMENTAL STUDY OF RELATIONSHIPS BETWEEN CLASSROOM STUDY OF DRAMA AND ATTENDANCE AT THE THEATRE

James Hoetker

By the end of the second year of the Project, we were ready to undertake an experimental investigation of several problems that had proven to be crucial to school-theatre relations in all three sites. These problems involved differences of opinion about the role--if any--that should be played by classroom teachers in preparing students to attend plays. Since the questions to be investigated involved beliefs about the effects of particular classroom procedures, it was anticipated that the results of the study would be of value to English teachers and English educators beyond those involved in the Project.

The experiment was prepared for during the summer of 1969 and carried out between September and March, 1969-70. More than 50 teachers in 14 Rhode Island school districts and over 1300 of their students were involved. The two Trinity Square productions involved in the study were O'Casey's Red Roses for Me and Shakespeare's Macbeth. No detailed account of the actual conduct of the experiment will be given here, but it must be noted that we received the most remarkable cooperation from both the schools and the theatre company, and we must express our appreciation particularly to the teachers who assisted us and to Miss Rose Vallely, Mr. Richard Cumming, and Mr. Donald Gardner.

The study has been written up specifically for an audience of English and Drama educators, so that it serves not only as a report of the findings of the experiment but also as a case history and as a primer introduction to multivariate factorial experiments. The report of the study is a separate volume of some 174 pages, which was published by CEMREL in February, 1970, and which is available either from Mrs. Verna Smith, CEMREL's Public Information Officer, at the address on the title page of this volume, or (late in 1970) from the National Council of Teachers of English, 506 S. Sixth Street, Champaign, Illinois, 61820. (The report is being published by NCTE as part of its series of Research Monographs.)

All that can be given here is a brief description of the experiment itself and a summary of the most important findings. The occasion for the study was the discovery, in the course of CEMREL's assessment of the Educational Laboratory Theatre Project, that, in each of the three

very dissimilar sites involved in the Project--New Orleans, Los Angeles, and Rhode Island--the same misunderstandings between the theatre and the school systems regularly occurred and persisted. It was possible to isolate the assumptions about the nature of the theatre and about the role of drama in the high school curriculum that underlay these misunderstandings, and it was possible to identify those variables that were amenable to quantitative description or to experimental manipulation. The study concentrated on the effects of classroom instruction variables upon student reception of a theatrical performance and on the effects of a theatrical production on student reception of classroom instruction.

Although the study was specifically concerned with the teaching of dramatic literature, its implications are much wider, in that the assumptions tested are basic to disputes within the English-teaching profession. Most basically, the assumptions being tested were that (1) classroom instruction itself makes a difference and (2) that some methods of instruction are better than others in achieving particular objectives. More specifically, the experimental study provides comparisons on a large number of dimensions between different combinations of instructional strategies.

The classroom treatment variables that were manipulated in the experimental design were: timing of the classroom instruction, content of the classroom instruction and intensity (i.e., length plus amount of material) of treatment. Each of the variables has been prominent in controversies aroused by the Project. In the design, each variable is two-leveled, although only the variable of timing (i.e., before or after the performance of the play) is self-evidently dichotomous.

One of the basic questions involved in the study was never directly a matter of dispute. This is the proposition that formal classroom instruction would make a difference in regard to what students learned from and felt about the plays they were to see in the theatre. The conception of the whole project embodies this assumption, and monies were allocated for the preparation of curriculum materials and the provision of copies of plays to students. The common belief in the fact that what went on in the classroom was vitally important, however, in some ways only served to heighten disagreements about the nature of the classroom treatment that should take place. If, for instance, the repertory company representatives had believed that classroom instruction was more or less irrelevant to a student's reception of the performance itself, they probably would not have cared what went on in the schools. And if the school representatives had not thought that instruction was essential to maximizing student benefit from the project, they would not have been as concerned as they were about the time required to teach three or four additional literary works in an already crowded curriculum.

Probably the most clear-cut disagreement between school and theatre people was on the matter of the timing of classroom instruction. English teachers, generally, believed that classroom instruction should precede any but the most elementary plays, so that students would understand what was going on. Most theatre people, conversely, believed that instruction should come only after the production had been seen. The reason for the difference is fairly clear. The training of the teachers was such that they gave primacy to the literary text and thought of the productions as an illustration of it--sort of a super audiovisual aid. The actors and directors, on the other hand, thinking of the play as existing, essentially, only in performance, could not see how students could be expected to benefit from talking about a play they had not seen.

So although there was disagreement between those who advocated instruction before or after performances, the essential point is that everyone believed that the timing did make a difference. Therefore, the variable of timing became one of major importance in the designing of the experimental studies reported later.

The second question at issue was whether, if there was classroom study, students should study the text of the play itself or study "everything except the play." The director of one of the repertory companies first made the latter recommendation when asked what he would like to see the English teachers do. His reasoning was that, by giving students a familiarity with the context of the play and with literature related to the play historically or thematically, the teacher could prime the students to respond to the play without depriving them of the pleasures of spontaneous response to it. This same suggestion later turned up in several interviews, and, as it made sense, the two levels of the content variables (text and background) were defined as "play-specific" (a study of the text of the play and of its backgrounds) and "play-related" (study of a related text and relevant background).

The final factor that entered into the design was that of intensity of treatment. In many schools it had been made clear by the administration that the English teachers were responsible for preparing students to see the plays, and that they should use the curriculum materials that had been provided for this purpose. But no provision was made for revising the curriculum to accommodate the addition of three or four extra units of work. Teachers believed, as noted earlier, that students needed to have a thorough study of the play and its background. But they complained that it was impossible to study all of the plays thoroughly without omitting or at least slighting, other and, to them, more important areas of the curriculum; and, further, that intensive study of the plays might even hurt the students by giving them less time to study in areas that would be included on achievement tests and college entrance tests.

Obviously, the time element is of practical importance and of intense concern to the English teacher. Therefore, the variables of intensity of treatment of text and intensity of treatment of background were

included in the design and each was defined, along the time dimension, at two levels. A brief treatment was defined as taking from one to two periods, an intensive treatment as taking from four to seven periods. A parallel definition in terms of amount of material was also made. If the experiment should show that classroom treatment did increase students gain from the program in areas important to the teacher, and further showed that the gain was as great from a brief-background plus brief-text treatments as from intensive treatments, then the necessary intrusion of the plays into the curriculum would become less serious, and teachers could give the plays relatively short periods of attention without feeling they were failing to cooperate with the Project.

In summary, these are the variables that are manipulated in various combinations with one another in the experimental study reported here.

FIGURE 1. SUMMARY OF TREATMENT VARIABLES

FOR THE EXPERIMENTAL TEACHING STUDY

Variable Name	Levels
BACKGROUND	Intensive (+), Brief (-)
TEXT	Intensive (+), Brief (-)
TIMING	Before (+), After (-)
MATERIALS	Specific (+), Related (-)
ORDER	First play, Second play

The dependent variables in the experiment consist of individual items such as a rating of a student's enjoyment of the play and a battery of tests covering areas identified in the "Place of Drama" study which was explained earlier in this volume. So that repeated scores on these tests could be obtained from all classes without an unreasonable intrusion upon the normal operation of the classes, an item sampling procedure was used, in which each student responds to a randomized ten per cent sample of items from each test. In this way, all the tests could be administered in a class in less than half an hour on any one occasion.

A schematic representation of the experimental design, which was worked out in consultation with Professors David Wiley of the University of Chicago and Thomas Johnson of Washington University, will be found in Figure 2. Note that the treatment used by a teacher in any experimental condition for the second play is mirror image of the treatment he used for the first play, thereby confounding unmeasured differences in the characteristics of teachers and classes.

Insert Figures 2 and 3 Here

An alternative conceptualization of the design matrix is given in Figure 3. This version makes clearer the relationship between treatments and the way in which the design confounds unmeasured nuisance variables.

Figure 4 summarizes the dependent variables, which were grouped into a number of categories or areas of response. The items on each of the tests were, as already mentioned, randomly distributed over ten forms of the test, with each student in a class answering one-tenth of the items on any test, and the class mean score being taken as that classes' contribution to the treatment mean on that variable. The cell entry for a treatment in the design matrix was the weighted mean of all classes in that treatment condition for each dependent variable.

Insert Figure 4 Here

The following paragraphs are quoted from the final chapter of the formal report of this investigation and will serve as a summary of its major findings. For additional information, consult the report itself.

Summary of Significant Effects

Within the "affective response" category, involvement scores seem not to have been affected by classroom treatments, while liking scores were affected differently by the timing of the classroom instruction, depending upon the play being performed.

In the knowledge category, the lowest scores on all tests were associated with the most intensive classroom treatments, but there was possibly an interaction between knowledge scores and the plays being performed. The highest scores on knowledge tests were also associated with an intensive study of the text before the performance--a finding not in contradiction of the earlier finding that an intensive study of the background plus an intensive study of the text produced the lowest knowledge scores.

Figure 2
The Design for the Experimental Teaching Study
(First Version)

BLOCK 1 = FIRST PLAY

Timing	Content of Lessons	Intensity		Subject ID Number
		B'kg'nd	Text	
Before Attending Performance	Play-Related	Intense	Intense	8
		Intense	Brief	16
		Brief	Intense	9
		Brief	Brief	1
	Play-Specific	Intense	Intense	6
		Intense	Brief	14
		Brief	Intense	11
		Brief	Brief	3
After Attending Performance	Play-Related	Intense	Intense	4
		Intense	Brief	12
		Brief	Intense	13
		Brief	Brief	5
	Play-Specific	Intense	Intense	2
		Intense	Brief	10
		Brief	Intense	15
		Brief	Brief	7

BLOCK 2 = SECOND PLAY

Timing	Content of Lessons	Intensity		Subject ID Number
		B'kg'nd	Text	
Before Attending Performance	Play-Related	Intense	Intense	7
		Intense	Brief	15
		Brief	Intense	10
		Brief	Brief	2
	Play-Specific	Intense	Intense	5
		Intense	Brief	13
		Brief	Intense	12
		Brief	Brief	4
After Attending Performance	Play-Related	Intense	Intense	3
		Intense	Brief	11
		Brief	Intense	14
		Brief	Brief	6
	Play-Specific	Intense	Intense	1
		Intense	Brief	9
		Brief	Intense	16
		Brief	Brief	8

Figure 3
The Design Matrix for the Experimental Teaching Study
(Second Version)

RUN	ORDER	BACKGROUND	TEXT	TIMING	CONTENT
1	First Play	-	-	+	-
	Second Play	+	+	-	+
2	Second Play	-	-	+	-
	First Play	+	+	-	+
3	First Play	-	-	+	+
	Second Play	+	+	-	-
4	Second Play	-	-	+	+
	First Play	+	+	-	-
5	First Play	-	-	-	-
	Second Play	+	+	+	+
6	Second Play	-	-	-	-
	First Play	+	+	+	+
7	First Play	-	-	-	+
	Second Play	+	+	+	-
8	Second Play	-	-	-	+
	First Play	+	+	+	-
9	First Play	-	+	+	-
	Second Play	+	-	-	+
10	Second Play	-	+	+	-
	First Play	+	-	-	+
11	First Play	-	+	+	+
	Second Play	+	-	-	-
12	Second Play	-	+	+	+
	First Play	+	-	-	-
13	First Play	-	+	-	-
	Second Play	+	-	+	+
14	Second Play	-	+	-	-
	First Play	+	-	+	+
15	First Play	-	+	-	+
	Second Play	+	-	+	-
16	Second Play	-	+	-	+
	First Play	+	-	+	-

FIGURE 4. SUMMARY AND DESCRIPTION OF DEPENDENT VARIABLES IN THE EXPERIMENTAL TEACHING STUDY

Group	Variable Name	Variable Number	Code**	Number of Items
I	Prior theatre experience		PREX	3*
	Verbal Intelligence		VIQS	30
II	Liking for performance		XLIK, YLIK	1*
	Intrinsic value	100	XINV, YINV	30
III	Knowledge: Quotations	201	XNOQ, YNOQ	20
	Knowledge: True-False	202	XNOT, YNOT	40
IV	Appreciation:Attitudes	400	XAPA, YAPA	30
	Appreciation:Cognitions	500	XAPC, YAPC	30
	Appreciation: Discrimination (pics.)	602	XADP, YADP	10
V	Desirable attitudes	700	XDAT, YDAT	30
	Desirable behaviors	800	XBEH, YBEH	20
	Theatre etiquette	900	XETQ, YETQ	30
VI	Philosophical understandings	950	XPHI, YPHI	10
VII	Appreciation: Discrimination (wri.)	601	XADW, YADW	20
	Interpretive skills	300	XINT, YINT	20

* Items thus marked were not item-sampled.
** The X prefix indicates first play, the Y prefix second play.

Within the "philosophical insights" category, the higher scores were associated with study of the specific play, with the intense study of both background and text, and with the intensive study of the specific play before the performance.

Within the appreciation category, the lowest appreciation: attitudes scores were associated with the most intense classroom treatments and the lowest appreciation:cognitions scores were associated with intense study of the background and with intense study of the text.

Within the "desirable attitudes and behaviors" category, higher scores on the desirable attitudes test were associated with brief study of the background, but there were no other significant effects.

Comments

In general, the relatively few effects which attained significance confirm the supposition that the English teachers preferred those arrangements which yielded the highest scores on the cognitive tasks they most highly valued. (The too-intensive treatments which depressed "knowledge" scores were not advocated by English teachers in general. Most teachers would rarely undertake so intensive a study of backgrounds as prescribed by the design.) Similarly, the actors preferred the arrangements that maximized scores in the areas of appreciation and affective response, with which they were most concerned. Although each group greatly over-estimated the importance of the factors, each seems to have predicted with some accuracy the effects of the factors upon student performance in the cognitive and affective areas. The case is still unsettled in the areas of attitudes and behaviors.

Further interpretations of these significant findings have already been presented and will not be repeated here. What will be repeated is that the overall impression created by the small number of significant effects is that the factors which figured in disputes about how students should be prepared for the theatre are not in themselves as important as had been thought.

Perhaps the most plausible explanation for the pattern of a scarcity of significant effects of factors which everyone agreed were important is this: the students' experiences in the theatre acted so powerfully to raise mean scores on all the dependent measures that the additional increases (or decreases) that could be effected

by manipulation of the classroom treatment variables were too small, in most cases, to distinguish between groups of students who shared the theatre experience in common. In other words, the students may have learned about all they could learn, within the alloted span of time, from the theatrical performance itself, so that the classroom treatments, taking place in conjunction with the performance, were largely redundant.

The "missing half" of the 2^{5-1} design used in this study (i.e., the "half" in which students would not see a performance of a play) would enable one to evaluate the effects of the independent variables apart from the performances of the plays. The design could be further simplified, if desired, to a 2^{5-2} design, by dispensing with the distinction between the "before" and "after" levels of the "timing" variable. Or, alternatively, the entire 2^5 design could be executed, with half the subjects attending the theatre and half not attending.

Be that as it may, the results of the present experiment do not support the positions taken either by educators or theatre people about the effects of different classroom practices as clearly as either group might have wished. Each group, however, may take comfort from particular findings, and each may care to take thought about what seems to be the relative impotence of classroom instruction to either inhibit or facilitate short-range student behaviors of the sorts measured in this study.

A STUDY OF THE EFFECTS OF THE NEW ORLEANS TOURING SHOW (1969)

Alan Engelsman

In the spring of 1968 CEMREL was asked by the Educational Supervisor in New Orleans to measure the impact of a special program she was planning as an introduction to the repertory company's 1969 production of "The Chairs" and "The Bald Soprano." The program would be a departure from the usual pre-performance preparation recommended by the supervisor; instead of each student receiving copies of the plays, reading them, and discussing them in class, playbooks would not be distributed and it would be recommended that in this instance the plays not be read. "The Chairs" and "The Bald Soprano" represent a form of theatre generally referred to as Theatre of the Absurd, and because of their unconventional plot structure, disjointed dialogue, and high reliance on verbal and visual theatrics the supervisor felt that the best approach would be to let the final plays of the 1968-69 season register first as a personal experience in the theatre. Then, following the productions the English teachers could discuss this new form of contemporary theatre and the plays themselves at any one of several levels of sophistication depending upon the interest and abilities of the students.

However, the supervisor also felt that, because the two Ionesco one-act plays would be so different from the kind of theatre the students had been accustomed to viewing, some sort of preliminary preparation was called for. As a result she conceived of a special assembly program which eventually came to be referred to as the Touring Show. The program was to be a dramatization which utilized various media and related Theatre of the Absurd to other forms of modern abstract artistic expression, especially painting, sculpture, and music. The supervisor wanted the Touring Show itself to have an abstract and absurd-like structure and hoped that in this way it would show students what they might expect at the same time as it told them about Theatre of the Absurd.

It was on the issue of where the line should be drawn between "show" and "tell" that the supervisor ran into conflict with the people she had first asked to write the script and to direct the Touring Show. Both the author, a teacher and free lance writer, and the director, a member of the repertory company who was working with the author, felt the program should avoid being didactic and rely primarily on "showing" students what to expect at the theatre. The supervisor felt something more concrete was needed; the students and most of their teachers as well would be seeing a different form of theatre for the first time, and she felt it was important that they be given a few generalizations

about this type of play before they attended the theatre. The supervisor considered the script that was initially submitted unsatisfactory, and the end result of the conflict was that a new writer and different director were contracted to produce the show.

In addition to the original scripters several members of the theatre company who had no connection with either the original or the final script questioned whether the money expended on that program was money well spent. They felt that, even though Ionesco's plays were unusual in form, they were fairly self-explanatory; they believed it was, after all, the actor's business to make the plays understandable. This attitude is clearly expressed in the producing director's summary statement about the Educational Laboratory Theatre Project which is printed elsewhere in this End-of-Year Report (p.135). Through the incidents surrounding the creation of the Touring Show accented this difference of opinion between the educational and theatrical partners in the ELT Project, it is a very natural difference which CEMREL had observed on numerous occasions. CEMREL's Experimental Teaching Study (see p.378) was designed in part to contrast the empirical effects of concentrated study prior to play attendance versus no preparation at all. It seemed wise in this case, then, to try to determine if the students themselves felt enriched by the Touring Show and if the specific generalizations the Educational Supervisor wanted to make about Theatre of the Absurd actually were made. That is, would the students have these generalizations in mind one week later when they viewed the production of "The Chairs" and "The Bald Soprano"?

The easiest way to find out if the students themselves felt enriched by the Touring Show was to ask them directly. The first two questions of a questionnaire distributed to one randomly chosen busload of students after each performance of the Ionesco one-acts read as follows:

1. About a week ago there was an assembly program at your school related to the plays "The Chairs" and "The Bald Soprano." Did you attend the assembly program?

   a. _____Yes
   b. _____No

2. If you did, do you feel it helped prepared you to understand better what was going on in the plays you have just seen?

   a. _____Yes, definitely
   b. _____Yes, somewhat
   c. _____No, not very much
   d. _____No, not at all

Three of the 585 students answering "yes" to the first question did not respond to the second one. The remainder indicated their feelings in the following way.

RESPONSE		NUMBER	PERCENT OF TOTAL
a. Yes, definitely		149	25.6%
b. Yes, somewhat		303	52.1
c. No, not much		94	16.2
d. No, not at all		36	6.2
	TOTAL	582	100.0%

When this response was tabulated separately for boys and girls the percentages in each case were almost identical with those reported above. When it was tabulated separately by grade level the percentages remained comparable but the older students tended to respond "Yes, definitely" more frequently than the younger ones (Seniors: 28.2%, Juniors: 26.1%, Sophomores: 21.5%).

What is clear in all the tabulations is that a large majority of the students (77.7%) felt that the Touring Show was a useful device in preparing them for the repertory production.

Of course, the real test of the effectiveness of the Touring Show is not whether the students thought they learned something by attending the program, but rather whether they could give evidence that they had learned something. Measuring the retention and application of generalizations made in an assembly program is a much more difficult matter than sampling student opinion. However, CEMREL made an attempt--first by determining what concepts the Touring Show was trying to teach, then by devising questions which might test the students' application of those concepts to the production, and finally by administering the questions to random groups of students (some of whom had seen the Touring Show and others who had not) immediately after they viewed "The Chairs" and "The Bald Soprano."

In addition to the students who answered "no" to the question about their attendance at the assembly program, there were about ten schools which did not request or had to cancel the pre-performance Touring Show, so CEMREL had a fairly substantial control group of non-viewers to choose a sample from.

Shortly before the Touring Show visited the first school on its schedule the Educational Supervisor sent CEMREL a statement which identified three generalizations that the assembly program would be stressing:

1. Ionesco has created a new form or structure for his play.

2. Life as seen by Ionesco presents restrictions, inconsistencies, and dilemmas that man cannot resolve.

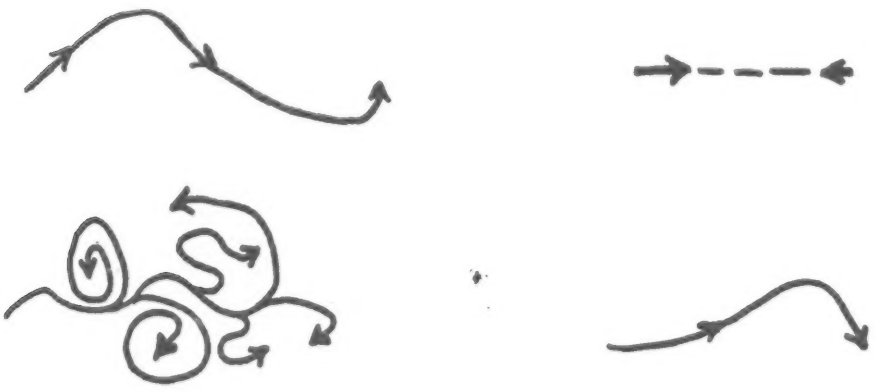
3. Ionesco tells us in "The Bald Soprano" that people don't really communicate.

She also suggested questions which might indicate whether the students were using these generalizations in thinking about the plays after seeing them. CEMREL used some of her suggestions and devised some additional questions which met with her approval.

Because the questions would be answered by students on busses returning to their schools after the performance, it was necessary to keep the number of questions to a minimum. Consequently six different questionnaire forms were used. Only one question related to a generalization stressed by the Touring Show appeared on each questionnaire form.

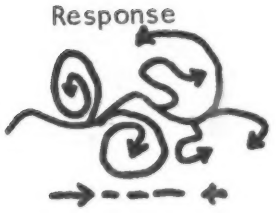
To measure the students perceptions about the unusual plot structure of "The Bald Soprano" the following question was used on one form of the after-theatre bus questionnaires and distributed to a total of 162 students during the run of the plays:

Which of the following diagrams do you feel best characterizes the plot of "The Bald Soprano"?

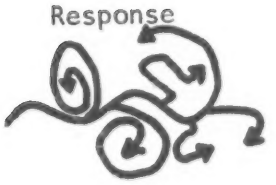


Of the four choices CEMREL and the Educational Supervisor agreed that the most appropriate would be the lower left one because of its suggestion of convoluted plot lines that dead end and turn back on one another. And the least appropriate would be the lower right one which comes close to representing the traditional diagram of a dramatic plot: rising action, climax, falling action. Of the other two choices the upper right one seemed slightly more acceptable because it possibly reflects the fragmentation of the plot with the last fragment pointing back to the first and it also suggests the absence of any rising and falling action. Of course, the question is highly abstract and 11 students were totally baffled by it and left it blank. One of them wrote, "Only a nut would answer this question." Ten other students read the four diagrams as only two choices and circled either both figures on the right side or both on the left. Tabulations of those responses that did indicate a single choice read as follows:

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW[1]

Response		Number Responding	Percent of Total Responding
	(most appropriate)	55	72.4%
		6	7.9
		14	18.4
	(least appropriate)	1	1.3
	TOTAL	76	100.0%

RESPONSES OF ALL STUDENTS WHO DIDN'T SEE THE TOURING SHOW

Response		Number Responding	Percent of Total Responding
	(most appropriate)	50	76.9%
		9	13.8
		6	9.2
	(least appropriate)	0	0.0
	TOTAL	65	99.9%

[1] Except for those instances in which inspection of the data clearly showed there was no possibility of significant variation, χ^2 was computed for the data given in each of the tables in this report; its value approached significance (P = .05) in only two cases, which are reported later. In all other cases, trends and differences may be taken to be non-significant.

RESPONSES OF STUDENTS FROM SCHOOLS WHICH DID NOT REQUEST THE TOURING SHOW

Response	Number Responding	Percent of Total Responding
	39	79.6%
	5	10.2
	5	10.2
	0	0.0
TOTAL	49	100.0

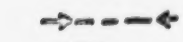
The above results are contrary to what one might expect (or at least to what the Educational Supervisor probably expected). If the categories are collapsed, as in the following contingency table, χ^2 approaches significance ($\chi^2 = 3.051$, 1df; $.10 < P > .05$). Students who did not see the Touring Show were more likely to choose acceptable responses than those who did see the show.

Response	Saw Show	Did Not See Show
Acceptable	61	59
Unacceptable	15	6

One interpretation of the data would be to say that the Touring Show gave students the impression that Theatre of the Absurd has a more logical pattern than their intuitions would tell them upon first viewing a play of this sort; therefore some rejected the most chaotic of the diagrams.

A further analysis of the data seems to be called for. One way to look more closely at the responses would be to separate those who answered "Yes, definitely" to the question which asked "Do you feel [the Touring Show] helped prepare you to understand better what was going on in the plays you have just seen?" from those who answered less emphatically or negatively. The tabulations below indicate that, for this form, the "Yes, definitely" group consists of only 17 students of the 76 who saw the Touring Show, too small a sample to draw any valid generalizations from.

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW ANALYZED IN TERMS OF THEIR ASSESSMENT OF ITS USEFULNESS IN AIDING UNDERSTANDING

Response	Students Saying, "No, not at all"	Students Saying, "No, not much"	Students Saying, "Yes, somewhat"	Students Saying, "Yes, definitely"
	1	13	32	9
	0	0	3	3
	1	1	7	5
	0	0	1	0
TOTAL	2	14	43	17

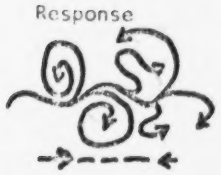
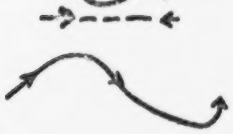
However, if a generalization were to be drawn it would have to be that the student's assessment of the Touring Show's usefulness has little relationship to his feeling for the plot structure of "The Bald Soprano."

Another variable which could substantially influence the sophistication of student responses is the relative amount of classroom preparation and study that preceded the viewing of the plays in spite of the supervisor's suggestion that, in this instance, teachers wait until after the performance to discuss the plays. CEMREL had included on each questionnaire form the following item:

> Did you in any way study about the plays in your English class before you came to see them?
>
> a. _____Yes, we read and discussed the plays
> b. _____Yes, our teacher told us something about them
> c. _____No, our teacher mentioned the plays but didn't really give us any background or preparation
> d. _____No

In general we learned that a higher percentage of students in schools which did not request the Touring Show (35.2%) read and discussed the plays before seeing them than did students in schools which viewed the Touring Show (10.8%). This might lead to the hypothesis that the relative amount of classroom study had a greater influence on the students' perception of structure than the Touring Show did. However, this hypothesis is not borne out by the following tabulations.

RESPONSES OF ALL STUDENTS ANALYZED IN TERMS OF AMOUNT OF REPORTED PRE-PERFORMANCE CLASSROOM ACTIVITY

Response	Activity Reported: No Class-Room Study	Only Brief Mention of Plays	Brief Discussion	Plays Read and Discussed	Information Not Reported
	28 (82.4%)	24 (66.6%)	40 (75.5%)	11 (68.8%)	2
	4	5	3	3	
	2	7	9	2	
TOTAL	0/34	0/36	1/53	0/16	2

If these small samples are at all representative, increased classroom preparation appears to have little influence on the students' likelihood of choosing the most appropriate response.

It is reasonable to conclude that the Touring Show did not significantly enhance student perceptions about the unusual plot structure of Ionesco's play, and one might even argue that it had an adverse effect.

Slightly more encouraging data was generated by the question which was designed to measure student awareness of the second generalization stressed in the Touring Show. That generalization was: "Life as seen by Ionesco presents restrictions, inconsistencies, and dilemmas that man cannot resolve." The question read as follows:

> In a boy meets girl, boy wants girl plot, what ending would best suit Ionesco?
>
> a. _____Boy gets girl
> b. _____Atom Bomb destroys world
> c. _____Girl rejects boy
> d. _____They live happily ever after
> e. _____Boy gets girl and discovers he hates her

Three of the five choices above were considered acceptable; two were deemed inappropriate. The choice which best reflects the irresolvable dilemmas and inconsistencies of life is "e." Next would probably be "b" and then "c." "Boy gets girl" is inappropriate because it fails to reflect a dilemma or restriction, and "They live happily ever after" is even more inappropriate in that it suggests an oversimplified (rather than impossible) resolution.

A total of 168 students responded to this item which appeared on one of the six bus questionnaire forms; 97 of them had seen the Touring Show and 71 had not. The following tables indicate their responses.

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW

Response		Number Responding	Percent of Total Responding	
e. Boy gets girl and hates her;	(most appropriate)	39	40.2%	60.8% acceptable responses
b. Atom bomb destroys world		14	14.4	
c. Girl rejects boy		6	6.2	
a. Boy gets girl		18	18.6	
d. Live happily ever after	(least appropriate)	20	20.6	
	TOTAL	97	100.0%	

RESPONSES OF ALL STUDENTS WHO DIDN'T SEE THE TOURING SHOW

Response	Number Responding	Percent of Total Responding	
e. Boy gets girl and hates her	26	36.6%	60.5% acceptable responses
b. Atom bomb destroys world	12	16.9	
c. Girl rejects boy	5	7.0	
a. Boy gets girl	19	26.8	
d. Live happily ever after	9	12.7	
TOTAL	71	100.0%	

A comparison of these two tables indicates that students who saw the Touring Show gave a higher percentage of most appropriate responses, and a fractionally higher percentage of acceptable responses. However, the difference in percentages are statistically non-significant ($\chi^2 = .001$, 1df; $P > .90$). The second table includes responses from twelve students whose schoolmates saw the Touring Show and may have discussed it with them; when those 12 responses are excluded the contrast between Touring Show viewers and non-viewers is more pronounced:

RESPONSES OF STUDENTS FROM SCHOOLS
WHICH DID NOT REQUEST THE TOURING SHOW

Response	Number Responding	Percent of Total Responding	
e. Boy gets girl and hates her	19	32.2%	55.9% acceptable responses
b. Atom bomb destroys world	9	15.2	
c. Girl rejects boy	5	8.5	
a. Boy gets girl	17	28.8	
d. Live happily ever after	9	15.2	
TOTAL	59	99.9%	

But, again, the differences are statistically non-significant (χ^2 = .363, 1df; P > .50), and one must conclude that the Touring Show did not measurably add to the students' insight about Ionesco's sense of "inconsistencies and dilemmas that man cannot resolve."

It is interesting to note that the second most popular response of Touring Show viewers is the least appropriate choice and the third most popular is also inappropriate. Again one who valued the Touring Show might be tempted to hypothesize that those students who indicated that seeing the Touring Show was an aid to their understanding may in fact be the ones who demonstrated an understanding of Ionesco's view of life and the ones who indicated that it wasn't much help were in fact somewhat confused by it and tended to choose inappropriate responses to the "Boy meets girl" question. However, such was not the case as the following tables indicate:

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW IN TERMS OF THEIR ASSESSMENT OF ITS USEFULNESS IN AIDING UNDERSTANDING

Response	Students saying "No, not at all"	Students saying "No, not much"	Students saying "Yes, somewhat"	Students saying "Yes, definitely"
e. Boy gets girl and hates her	5	9	16	9
b. Atom bomb destroys world	2	2	6	3
c. Girl rejects boy	1	2	2	1
a. Boy gets girl	2	3	11	2
d. Live happily ever after	0	1	15	4
TOTAL	10	17	50	19

One student who chose "b" failed to indicate his assessment of the Touring Show usefulness.

A glance at the two extremes reveals that 50% of the students who said the Touring Show was no help at all chose the most appropriate response and slightly less than 50% of the students who felt the assembly program definitely was helpful made the same choice. Since percentages can be misleading when such small numbers are involved, the four groups in the above table are reduced below to just "no's" and "yes's."

Response	Students Saying "No"		Students Saying "Yes"	
	N	%	N	%
e. Boy gets girl and hates her	14	51.9%	25	36.2%
b. Atom bomb destroys world	4	14.8	9	13.0
c. Girl rejects boy	3	11.1	3	4.4
a. Boy gets girl	5	18.5	13	18.8
d. Live happily ever after	1	3.7	19	27.5
TOTAL	27	100.0%	69	99.9%

In this case, there is a significant relationship between the number of acceptable responses and student assessment of usefulness ($\chi^2 = 4.734$, 1df; $P < .05$)--but it is a negative one. More students who said the Touring Show was useful chose the inappropriate responses to this question!

Response	No	Yes
Acceptable	21	37
Unacceptable	6	32

A similar analysis in terms of the amount of classroom preparation students stated they received failed to reveal any clear patterns or trends related to choosing appropriate or inappropriate responses to the question.

The third generalization stressed in the Touring Show concerned Ionesco's belief that people today don't really communicate. A more sophisticated statement of his belief would be that language is an ineffective means of communication which often tends to hamper rather than aid mutual understanding. The question used to measure how well the Touring Show itself communicated these ideas (using both language and actions) read as follows:

> Ionesco has said his play "The Bald Soprano" is, in part, a play about language. Which of the following statements best describes what Ionesco has to say about language in the play?
>
> a. _____People will understand one another if they learn to talk things out.
> b. _____The need to communicate will never be satisfied through language.
> c. _____Language is the best way people today communicate.
> d. _____Some people don't know how to communicate effectively.

The most appropriate response (and the most sophisticated one) is "b". The final choice, "d," would be almost as good if the question were more directly about communication and if the response were worded, "Most people don't know how to communicate effectively." The other two responses are inappropriate in that they contradict Ionesco's feelings about language; "c" presents the strongest contradiction. An analysis of 162 student responses appears on the following page. The tables are similar to those used for the earlier questions.

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW

Response		Number Responding	Percent of Total Responding
b. Need to communicate not satisfied by language	(most appropriate)	26	25.5%
d. Some people don't communicate		51	50.0
a. People will...talk things out		13	12.7
c. Language is best means of communication	(least appropriate)	12	11.8
	TOTAL	102	100.0%

RESPONSES OF ALL STUDENTS WHO DID NOT SEE THE TOURING SHOW

Response	Number Responding	Percent of Total Responding
b. Need to communicate not satisfied by language	14	23.3%
d. Some people don't communicate	31	51.7
a. People will...talk things out	7	11.7
c. Language is best means of communication	8	13.3
TOTAL	60	100.0%

RESPONSES OF STUDENTS FROM SCHOOLS WHICH DID NOT REQUEST THE TOURING SHOW

Response	Number Responding	Percent of Total Responding
b. Need to communicate not satisfied by language	11	21.6%
d. Some people don't communicate	26	51.0
a. People will...talk things out	6	11.8
c. Language is best means of communication	8	15.7
TOTAL	51	100.1%

In this instance the percentages on the three tables are so close that it is difficult to make any valid distinctions. It is true that a slightly larger percent of students who saw the Touring Show picked the most sophisticated response, but it is also true that almost 75% of all the students selected appropriate responses. It seems safe to assume that Ionesco's attitudes towards language and communication were fairly self-evident in the production of "The Bald Soprano" itself. An analysis of the responses in terms of the students' assessment of the Touring Show's usefulness and in terms of the amount of classroom time devoted to the study of the plays again produced no significant differences which would further illuminate the data.

A fourth question obliquely measured the students' sensitivity to two of the above mentioned generalizations. It was phrased as follows:

> If the author of "The Bald Soprano" were to comment on the Paris peace talks, which of the following statements do you think would come closest to expressing his point of view?
>
> a. _____I have high hopes the talks will lead to an honorable settlement of the Vietnam conflict.
> b. _____The Viet Cong cannot be trusted.
> c. _____Most of the statements made by both sides are meaningless.
> d. _____I believe the choice of a round table for the talks was ridiculous.

Response "c" suggests not only that language (talk) has a tendency to confuse rather than clarify communication but also that life is full of irresolveable inconsistencies which make much of what we do and say meaningless. The CEMREL staff and the Educational Supervisor agreed that "c" was the most appropriate response. They also agreed that an acceptable response would be "d" in that it reflects a sense of the absurd elements in human affairs. The second response, "b," was deemed inadequate in that it had little apparent connection with Ionesco and merely represented a stock patriotic response. And the first response, "a," was considered least acceptable because it suggests an easy resolution to a dilemma and is a perfect example of the cliché-ridden use of language Ionesco ridicules in his play.

A total of 165 students answered this question and their responses are tabulated on the following page.

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW

Response		Number Responding	Percent of Total Responding
c. Statements by both... meaningless	(most appropriate)	55	59.1%
d. Choice of round table... ridiculous		19	20.4
b. V.C. cannot be trusted		11	11.8
a. High hopes...honorable settlement	(least appropriate)	8	8.6
	TOTAL	93	99.9%

RESPONSES OF ALL STUDENTS WHO DID NOT SEE THE TOURING SHOW

Response		Number Responding	Percent of Total Responding
c. Statements by both... meaningless		42	58.3%
d. Choice of round table... ridiculous		10	13.9
b. V.C. cannot be trusted		8	11.1
a. High hopes...honorable settlement		12	16.7
	TOTAL	72	100.0%

RESPONSE OF STUDENTS FROM SCHOOLS
WHICH DID NOT REQUEST THE TOURING SHOW

Response		Number Responding	Percent of Total Responding
c. Statements by both... meaningless		34	59.7%
d. Choice of round table... ridiculous		8	14.0
b. V.C. cannot be trusted		6	10.5
a. High hopes...honorable settlement		9	15.8
	TOTAL	57	100.0%

As with the previous question, the percentage of all students choosing appropriate responses is so high that it seems logical to assume that the repertory "Bald Soprano" itself did an effective job of suggesting what Ionesco's point of view would be. But the percentages of students selecting two of the possible choices deserve a closer examination. First, a higher percentage of students who saw the Touring Show selected the response which stated, "...the choice of a round table...was ridiculous." This suggests that the Touring Show conveyed the idea that Ionesco was concerned with absurdities in modern life, which is perhaps a valid corollary to the generalization that life "presents restrictions, inconsistencies, and dilemmas that man cannot resolve." Also, a considerably lower percentage of these same students chose the least appropriate cliché response: "I have high hopes the talks will lead to an honorable settlement." One explanation might be that the Touring Show made its audience aware of Ionesco's suspicion of broad generalities and easy resolutions. (But all differences are non-significant.)

It is interesting to note that for this item there was again, no relationship ($\chi^2 = 0.327$, 1df; $P > .50$) between how useful students felt the Touring Show was and the percentage which chose the appropriate answers.

RESPONSES OF STUDENTS WHO SAW THE TOURING SHOW ANALYZED IN TERMS OF THEIR ASSESSMENT OF ITS USEFULNESS IN AIDING UNDERSTANDING

Response	Students Saying "No, not at all"	Students Saying "No, not much"	Students Saying "Yes, somewhat"	Students Saying "Yes, definitely"
c. Statements by both... meaningless	3	6	28	18
d. Choice of round table... ridiculous	3	3	10	3
b. V.C. cannot be trusted	0	3	7	1
a. High hopes...honorable settlement	1	1	4	2
TOTAL	7	13	49	24

And an analysis of responses in terms of the type and amount of classroom preparation revealed that the variable of reading the play before seeing does not seem to have influenced student responses to this item. The table below compares those who saw the Touring Show but did not read the play with those who neither saw the Touring Show nor read the play.

COMPARISON OF RESPONSES OF STUDENTS WHO DID NOT READ "THE BALD SOPRANO" BEFORE SEEING IT

Response	Saw Touring Show N	Saw Touring Show %	Did not see Touring Show N	Did not see Touring Show %
c. Statements...meaningless	49	59.8%	30	53.6%
d. Table...ridiculous	17	20.7	10	17.9
b. Cannot trust V.C.	10	12.2	6	10.7
a. High hopes	6	7.3	10	17.9
TOTAL	82	100.0%	56	100.1%

This suggests that, in terms of the concepts this item was measuring, the Touring Show had no significant effects on students who had not read the play. When students who saw the Touring Show and did not read the play are compared with students who read the play but did not see the Touring Show, there are, again, no significant differences in the percentage of appropriate responses given ($\chi^2 = 0.438$, 1df; $P > .50$).

The same "no difference" finding holds when students who saw the show and did not read the play are compared to those who both read the play and saw the show ($\chi^2 = 0.359$, 1df; $P > .50$), although by this stage the cell entries in the contingency table drop below the level where the χ^2 is reliable.

Two other forms of the questionnaire included entirely different kinds of items. One was an open-ended question which was phrased as follows:

> Imagine for a moment that you are to lead a discussion of "The Chairs" in your English class tomorrow. What two or three aspects of the play do you feel are so important they should be included in the discussion?
>
> _____
>
> _____

The question was designed as another possible way of determining if the Touring Show influenced student thought. Would any who attended the assembly mention issues or incidents which had a relationship to the concepts stressed in the Touring Show? Would they have more pertinent ideas about where to begin a discussion than students who had not seen the Touring Show? It would not be realistic to expect much of a difference between the responses of students who did and did not attend the assembly program, but if there were differences, the question might add some insight about the effect of the Touring Show.

A total of 158 copies of this form of the questionnaire were distributed. Twenty-eight students indicated that they had read and discussed "The Chairs" in class, and since their comments would probably reflect what was said in the classroom rather than what was stressed by the Touring Show or implied by the repertory production, these responses were excluded from any tabulations. Of the remaining 130 respondents 79 saw the Touring Show and 51 did not. A slightly higher percentage (35% as opposed to 27%) of those who saw the Touring Show either left the question blank or wrote in a comment like "none" or "I didn't understand the play." So the Touring Show apparently did not give students a greater sense of security about venturing an opinion. However, a content analysis of the actual comments does reveal a slightly fuller awareness of general concepts related to Theatre of the Absurd on the part of

Touring Show viewers when compared to non-viewers. About 29% of the 51 Touring Show viewers made statements which might be said to touch on thematic concepts rather than specific details of the script, stage business, or scenery; only 19% of the 37 non-viewers made such statements. But the range of comments was not significantly different; both types of students commented on such matters as failures in communications, isolation and loneliness, and the lack of continuity in events or dialogue. Several Touring Show viewers also alluded to the theme of the meaninglessness (or shallowness or futility) of existence. Perhaps this was a generlization about Theatre of the Absurd that the Touring Show suggested even though it was not one the Educational Supervisor cared to emphasize. In sum, this open-ended item yielded little new information except to suggest, once again, that generalizations about Theatre of the Absurd could be and were communicated to students by other agents as well as the Touring Show.

The second "different kind of item" alluded to earlier was a version of Osgood's semantic differential. Thirteen pairs of contrasting adjectives were listed on a page. The antonyms were separated by a line divided into seven spaces and students were directed: "Your job is to think about the conversation in the production of 'The Bald Soprano' and mark where you would place it on the line between each pair of words." Sample responses were shown and explained. There were, of course, no "most appropriate" or "unacceptable" responses on this form, but the mean responses of those who saw the Touring Show could be compared with the mean responses of those who didn't and any differences might then be examined more closely in terms of the Touring Show's content.

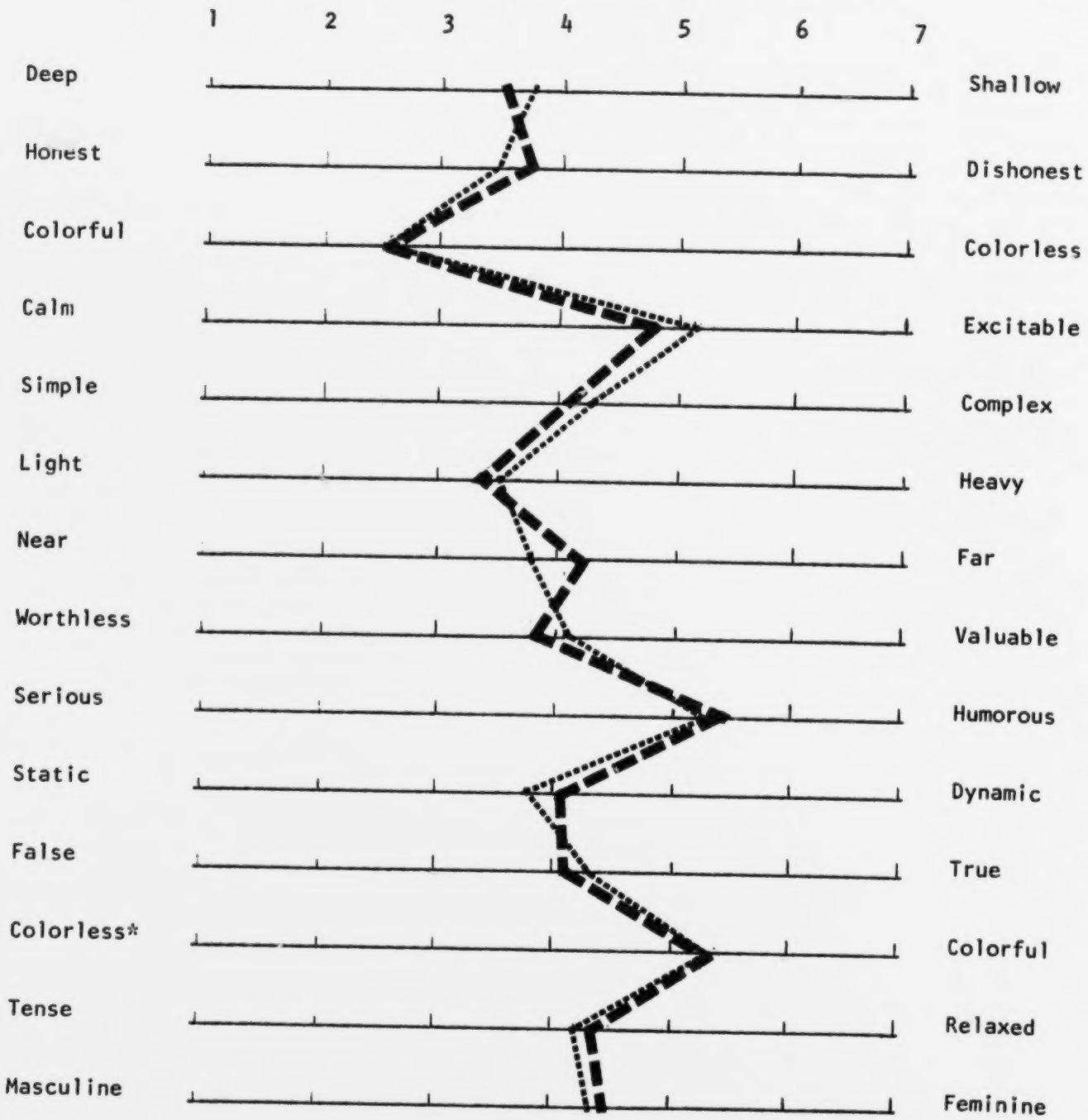
A total of 94 students who saw the Touring Show and 70 who did not completed these forms and the chart on the following page graphically represents the average response of each group. It is obvious at a glance that there are no significant differences and the only conclusion one can draw is that the Touring Show did not noticeably affect the way students viewed conversation in the production of "The Bald Soprano."

Almost all the items discussed so far, then, suggest that there is little difference in the cognitive awareness of those students who viewed the Touring Show as compared with those who didn't. The null hypothesis of this study would be that the Touring Show does not measurably change student attitudes and cognitions. The data so far does not enable us to reject that hypothesis.

One still might argue that, though the Touring Show did not demonstrably affect what the students learned, it very probably did affect how they felt about the plays they saw. After all, over 77% who saw the Touring Show said they felt it helped them understand the plays and there is a considerable amount of anecdotal and written testimony from both students and teachers which indicates that there was great enthusiasm for the Touring Show. Almost any observer who saw the student response at any one of the assembly programs would probably acknowledge that the Touring Show was a popular success. But that in itself does not necessarily mean that it effectually preconditioned students to enjoy the Ionesco one-acts.

A COMPARISON OF STUDENTS WHO SAW THE TOURING SHOW
AND THOSE WHO DID NOT

CONVERSATION IN THIS PRODUCTION OF "THE BALD SOPRANO"



* This item was intentionally repeated as a means of checking the consistency of the responses.

▬ ▬ No Touring Show

▪▪▪▪▪▪▪▪ Touring Show

There were three additional items on four of the six bus questionnaire forms which attempted to get some kind of measure of student attitudes toward the plays they had just seen. The data collected from those items suggest that, if anything, the Touring Show had a negative effect on the students' attitudes toward the one-act plays. However, it would probably be more accurate to say they indicate that the Touring Show had little effect.

One of these items asked straight out, "Did you enjoy the plays you just saw?" Of the 395 students who saw the Touring Show 342 (86.6%) said they enjoyed "The Bald Soprano"; 87.8% (245 out of 279) of those who didn't see the Touring Show expressed a similar opinion. For "The Chairs" only 33.9% of the Touring Show viewers said they enjoyed it whereas 37.6% of the non-viewers expressed approval. It may be that the Touring Show built expectations up too high, a situation which would speak well for the Touring Show's own popularity but not too well for its achieving its objectives.

A second item asked students to rank the plays presented during the 1968-69 season in terms of enjoyment. Though the mean rank order varied for those who saw the Touring Show and those who didn't, the position of the two Ionesco one-acts in those orders was the same:

RANKING OF 1968-69 PLAYS IN TERMS OF ENJOYMENT

By Students Who Saw Touring Show	Most Enjoyable	By Students Who Didn't See Touring Show
Arms and the Man	1	Arms and the Man
"The Bald Soprano"	2	"The Bald Soprano"
Twelfth Night	3	An Enemy of the People
An Enemy of the People	4	Twelfth Night
"The Chairs"	5	"The Chairs"
	Least Enjoyable	

However, a third item which asked for a similar ranking in terms of "'meaningfulness' to young people today" yielded a slight difference:

RANKING OF 1968-69 PLAYS IN TERMS OF MEANINGFULNESS

By Students Who Saw Touring Show	Most Meaningful	By Students Who Didn't See Touring Show
An Enemy of the People	1	An Enemy of the People
"The Bald Soprano"	2	"The Bald Soprano"
Arms and the Man	3	Arms and the Man
Twelfth Night	4	"The Chairs"
"The Chairs"	5	Twelfth Night
	Least Meaningful	

It is difficult to say what this shift in order suggests, if anything. (A further analysis of the data reveals that it is not a function of the fact that a greater percentage of the students who didn't see the Touring Show read the plays in class.) But one thing the shift clearly does not suggest is that the Touring Show had a positive effect on student attitudes toward the Ionesco plays.

In total, then, the major finding of this study is one of "no difference." There are undoubtedly still many good reasons that could be advanced for having the Touring Show. For one thing it was a departure from the usual pre-playgoing procedures and called attention to the theatrical as opposed to the literary qualities of drama. For another, it took the burden of explaining a new form of theatre off the shoulders of the already overburdened classroom teachers, many of whom may have felt more uncomfortable with the chaotic structure of Ionesco's plays than their students. And it undoubtedly provoked the students' curiosity whether it influenced their subsequent attitude toward the plays or not. However, this study was not designed to measure the above mentioned kinds of outcomes. For the ones it was designed for, the conclusion one must draw is that the Touring Show had little effect on either students' reactions to the repertory production or on their understanding of Ionesco.

AN AUDIENCE REACTION STUDY

Alan Engelsman

When a playwright puts dialogue and stage directions on a page or when a director interprets the playwright's words for the stage, each has a fairly clear idea in his mind about how he feels the theatre audience will react to the words and actions they hear and see. In most cases the author and director's concept of probable audience reactions will be similar. And in most cases their feelings are assumed to be fairly accurate. The primary objective of the Audience Reaction Study was to determine how accurate such predictions of the audience reactions actually are.

To what extent, we asked, can the author and/or director predict the overt reactions of his audience and to what extent can he influence the attitudes of individuals in the audience toward specific characters? In the case of the New Orleans production of Enemy of the People the director and author (translator) were the same person, David Scanlan, and he consented to identify six moments in the production as well as one or two concepts which lent themselves to this particular study.

A secondary objective related to the sophistication of student responses on an emotional or affective level. Some educators may wonder if students have learned to pick up nuances of interpretation and characterization in the theatre. How close are their attitudes toward the main character to those that the writer or director holds himself?

The following paragraphs outline the design and results of the study in some detail. Specifically they describe the procedures we followed in predicting and measuring overt responses and in identifying and measuring concepts stressed in this production. In each case there is also a close analysis of the measures we actually got, and a discussion of the implications of our findings.

Predicting and Measuring Overt Responses

The task of identifying moments in the production that might in some way be quantatively measured was one that had to be performed by the director, David Scanlan. Ideally, he should have selected the moments during the last week of rehearsal before any performances had been given at all. However, the last minute pressures of production made this impossible. It was only after four student performances and one preview performance for the general public that Mr. Scanlan had time to select the lines which he felt would represent a range of overt audience responses from "laughter coupled with applause" to "attentive silence."

It was important to make the measurement of these moments as unobtrusive as possible. Therefore we merely set up a microphone above the audience and at each performance tape recorded the lines leading up to and including the ones Mr. Scanlan had singled out. The volume control on the recorder remained at one setting throughout the run of the play, so it was easy to check the relative intensity of responses (using a VU meter) when the tapes were played back. An assistant stage manager operated the tape recorder.

In total Mr. Scanlan picked six moments which were evenly distributed throughout the course of the play. For three of those lines there was an audible response and we have VU readings on a scale ranging from 0 to 15. A chart showing all of the evidence we recorded including variables such as weather conditions, number in attendance, and time of performance is on the facing page, but because there are several places where the data on the chart are incomplete, it is difficult to assess as a single piece of evidence. Consequently we shall examine each response in turn.

The specific moments Mr. Scanlan selected represent a range from "very predictable" to "highly unpredictable" responses. The first one in the play was one of the latter variety. He chose an obscure line uttered by Dr. Stockmann: "I suppose there's no lamp in my study again," and said there should be laughter on this line or on the following business. He felt that laughter was more likely as the run of the play progressed because it required that the audience be attentive at the very opening of the curtain when there was some business with the maid carrying Dr. Stockmann's lamp to his study. As a director he felt that by about the middle of the run the actors would learn to get the audience's attention closer to the curtain's rise and then the reference to the lamp would be funny. In actual fact the line did not draw a laugh at any time during the run of student performances. This would indicate either that the director/author's anticipation of an audible laugh at this point in the play was unrealistic or that the actors failed to win the attention of the students until sometime after the business with the lamp.

Director Scanlan was on surer ground in his second prediction. Morten Kiil is incredulous when Dr. Stockmann tries to describe bacteria in the public baths as tiny animals invisible to the eye. He chuckles and says, "I'm damned if this isn't the best one you've pulled yet." Scanlan predicted laughter along with Kiil's laugh.

Measuring the response to this line was somewhat difficult because the actor who played Kiil inserted a chuckle and a bit of business that drew a strong laugh just before the line we were monitoring and in most cases the line Scanlan had singled out helped prolong the laughter rather than create a distinguishable separate response. On two occasions (March 5 and March 7), however, when the earlier business did not draw a strong laugh, the line Mr. Scanlan had picked got a distinct and hearty response from the student audiences. In fact the VU readings for every date except those two ranged from 6 to 12½ on March 5 and 7 the VU reading was 14, one point below the maximum on the meter. Obviously, the director's belief that this was a laugh provoking line was correct. He merely misjudged the impact of the business preceding it.

A CHART OF STUDENT RESPONSES TO SIX LINES IN AN ENEMY OF THE PEOPLE

Date	2/26	2/27	2/28	3/3	3/4	3/5	3/6	3/7	3/10	3/11	3/12	3/13	3/14	3/18	3/19	3/20	3/21	3/24	3/25	3/26	3/27	3/28
Weather	RC	RC	SC	C	C	RC	C	C	C	RC	OC	OC	SW	C	C	C	C	W	C	W	W	SW
Attendance	1000	950	1350	1541	1150	1100	1100	1229	1200	1150	1000	1100	1425	1350	1200	1050	1100	1150	825	1310	1300	1350
Boys	1000	0	Coed	673	150	Coed	Coed	1017	Coed	Coed	Coed	Coed	900	Coed	Coed	Coed	Coed	Coed	Coed	0	Coed	450
Girls	0	950	Coed	868	1000	Coed	Coed	212	Coed	Coed	Coed	Coed	525	Coed	Coed	Coed	Coed	Coed	Coed	1310	Coed	900
SES of Schools	L	M	L,M	M,H	L,M	L	L	L,M	L	H	L,H	H	M,H	L,H	H	L,M	M	L	L,M	LMH	LMH	M,H
Time of Performance	AM	AM	N	N	AM	AM	AM	N	N	AM	AM	AM	N	AM	AM	AM	N	N	AM	AM	AM	N
RESPONSE																						
Laugh #1	NO	NO	X	NO	NO	NO	NO	NO	NO	NO	NO	X	NO	NO	NO	NO	NO	NO	NO	NO	X	NO
Laugh #2	YES	YES	YES	YES	X	YES	YES	YES	YES	YES	YES	X	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
VU Reading	12½	8	12½	11		14	9	14	9	11	11		8	12½	10	11	8	6	10	8	8	10
Laugh #3	NO	NO	NO	NO	NO	NO	NO	NO	NO	?	NO	NO	NO	NO	?	NO	NO	NO	NO	?	NO	NO
VU READING										8					4					1		
Silence #4	YES	YES	YES	YES	YES	YES	X	X	YES	YES	X	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Laugh	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	X	YES	YES	YES	X	LOST	YES	X	YES	YES	LOST	LOST
Applause	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		NO	NO	NO			NO		NO	NO		
#5																						
VU Reading	4	8	6	9	10	8	11	8	8	8		1	6	4			9		4	1		
Laugh	YES	YES	YES	YES	YES	YES	X	X	YES	YES	YES	YES	YES	X	YES	X	YES	YES	X	X	YES	X
#6																						
VU Reading	13	13	12½	14	15	8			8	14	9	11	12½		12½		9	12½			12½	

Abbreviations for weather: R = rainy; W = warm; C = cold; S = sunny; O = overcast
VU readings range in intensity from 0 to 15
"X" indicates that the particular response was not recorded on that date
"lost" indicates that the line was drowned out by laughter in response to an earlier line

The third line picked out by Mr. Scanlan is spoken in the newspaper office. The audience has just seen Mayor Stockmann "convince" the editor and printer of the newspaper not to print an article about the public baths written by his brother, Doctor Stockmann. Unaware of the editor's capitulation, the doctor enters the office and expresses concern that, when his fellow citizens read his article in the paper, they will try to honor him. The editor tries to explain his shift in plans, but the doctor misinterprets his stuttering attempts as a confirmation that some kind of demonstration is being organized, and he urges the editor to put a stop to it.

> Dr. Stockmann: Well, whatever it is--a torchlight parade, or a banquet in my honor--

Scanlan predicted that the reaction to this line would be laughter. He felt that not all audiences would laugh out loud but the maturer ones would and should. In actuality he seems to have misjudged the impact of the line. The students may have chuckled inwardly at the irony, but there wasn't the slightest hint of overt laughter in 19 of the 22 student performances. In the three instances where the VU meter did register some reaction it would be difficult to call the tape recorded response laughter.

The director's fourth prediction differed from the others in that this time he anticipated "silence" in response to a line rather than laughter. Dr. Stockmann is addressing a public meeting and he shocks his fellow townspeople by saying, "The real enemies of truth and freedom among us are the solid majority. . ." Mr. Scanlan felt that this line should have a similar effect on the viewing audience. And it did. A silence at this point was discernible 100% of the time. This silence, by the way, came in the midst of a scene that was punctuated by shouts and exclamations, and it is clear that the students were not only enjoying the scene but paying close attention to Stockmann's argument.

In selecting the final two lines to be monitored director Scanlan again chose ones he believed would draw laughter. The fifth prediction involved a statement uttered by Dr. Stockmann after he finds a rip in his pants: "A man should never wear his best trousers when he goes out to fight for freedom and truth." Scanlan felt this would not only get a laugh but applause as well.

Our measurement of the reaction was marred in the same way that the measurement of Morten Kiil's line was. Just before making this speech Stockmann revealed the rip in his trousers and the business drew a consistent strong burst of laughter. On three occasions the laughter was so loud and sustained that the line we were monitoring was completely lost. On all the other occasions the line was clearly anti-climactic to the earlier business and the laughter was in the process of dying down. At no time was applause discernible. Here it appears that Director Scanlan and his actors chose to emphasize the humor of a situation one beat earlier than author Scanlan felt the emphasis should come. Or perhaps the young audiences were so taken with the unveiling of the rip in the trousers that it was impossible for the actors to hold back long enough for the next line to register effectively.

The final predicted laugh line is the fourth to last line of the play. Dr. Stockmann, who has been making "important discoveries" throughout the course of the play announces once more, "I have made an important discovery," to which Mrs. Stockmann responds: "Not again!" Scanlan was 100% correct in predicting that the audience would laugh at her reaction, and in most cases the intensity of the response to this line was greater than it was to any of the other lines.

The variance in intensity of responses from performance to performance might lead observers to speculate about factors which affect audience reactions. Some people have suggested that the way student audiences are segregated by sex at some performances affects the way they react. Others contend that the weather or the time of the performance may influence both actors and viewers. On our overall chart we noted several of these kinds of variables, but when we tried to analyze a response in terms of each of the variables listed we could not find any patterns which indicated that it significantly influenced the intensity of student reactions. We do not mean to suggest that the variables are unimportant; only that we could not measure their importance.

Reviewing all six predictions and the actual responses it is clear that Mr. Scanlan was right more often than he was wrong. However, it would appear that there are too many variables operating to make it possible for a director to select with infallible accuracy a series of exact lines that will evoke overt audience responses. There are the variables of an actor's interpretation, delivery, and sense of timing, and there is the variable of the audience itself. On the other hand, the director can predict with a fair amount of accuracy (an exception being Mr. Scanlan's third prediction) the general mood of an audience during a sequence of lines.

Identifying and Measuring Concepts

The central thought that led Mr. Scanlan to write his own English version of Ibsen's play was his dissatisfaction with the characterization of Dr. Stockmann in other American adaptations. He wanted to capture something more of the complexity in Stockmann's character. The doctor is not merely an heroic crusader fighting ignorance and greed; he is a fallible human being, politically naive, egotistically motivated, and in some ways laughably muddle-headed. In short, as director Scanlan put it, the audience should feel a little uncomfortable identifying with the hero.

Probably the most effective method of getting an accurate measure of an individual's feelings toward the main character in a play he has just seen is to conduct a personal interview directly after the performance, but unfortunately this device is too cumbersome if one wants to get a broad estimate of audience attitudes. Consequently, we chose to use brief questionnaires and administer them to students during the bus ride back to school. We reached a random cross-section of student audiences by distributing a mixture of eight different questionnaire forms to one busload of students after each performance. All the questions related in

some way to the character of Dr. Stockmann and in every case but one Mr. Scanlan first made predictions about the kinds of responses he expected students to make if they were at all sensitive to the complexity in Dr. Stockmann's character and he then described what he would consider the ideal response. The nature of his predictions can best be understood by looking at the specific questions.

Forms 2, 4, 6, and 6A all involved multiple choices. The first three questions on all these forms were identical. The first question was phrased as follows:

1. In an election for mayor, between Dr. Stockmann and Mayor Stockmann, I would vote for:

   a. _____Dr. Stockmann
   b. _____Mayor Stockmann

Mr. Scanlan noted that the natural choice for students would be Dr. Stockmann. He, after all, was the hero fighting corruption. However, Scanlan felt that if the production was successful in conveying some of the doctor's flaws, at least 20% of the students would choose the mayor. The ideal response in his mind would be a 50-50 split.

In actuality the vote for Dr. Stockmann was even stronger than Scanlan anticipated. Out of a total of 755 respondents, 714 (94.6%) chose the doctor. Two interpretations can be offered here: either the director and actors failed to establish the ambiguities they were striving for or Scanlan's initial prediction was unrealistic in light of the idealistic characteristics of youth.

2. If I were a soldier I would rather be led into combat by:

   a. _____Dr. Stockmann
   b. _____Mayor Stockmann

Here Scanlan anticipated that 75% would choose Dr. Stockmann and 25%, Mayor Stockmann. Again he would like to have seen an even larger percentage (40%) choose the mayor and fewer (60%) for the doctor.

Six hundred two students responded to this question and 498 (82.7%) chose Dr. Stockmann. Again, the percentage is higher than Scanlan predicted, but he was right in believing that fewer people would choose the doctor in this situation than in the political one. Another interesting fact is that when the responses were broken down by grade level, 88% of the sophomores chose Dr. Stockmann, 81.4% of the juniors chose him, and only 78.2% of the seniors chose him. Apparently, in this case, the older and presumably more sophisticated youngsters were more able to perceive flaws in the central character. It is also interesting to note that when the seniors (N=178) were broken down by sex 31.6% of the boys (25 out of 79) as opposed to 14.1% of the girls (14 out of 99) chose the mayor in preference to the doctor. Many of those senior boys may soon be soldiers and perhaps gave the question more sober consideration. This was the only question on all the forms which yielded differences of this sort when responses were broken down by grade and sex.

3. I would rather go to a party at:

a. _____Dr. Stockmann's house
b. _____Mayor Stockmann's house

The director felt the response to this question would be about 95% choosing Dr. Stockmann's house and 5% choosing the mayor's and this is about the kind of response that he would hope for. The doctor is a much more jovial, friendly type than his brother who is formal and cold.

In this instance Scanlan's prediction was very close to the actual student tally; of 606 respondents, 558 (92.1%) chose the doctor.

The fourth question on forms 2, 4, 6, and 6A varied and Mr. Scanlan made slightly different kinds of predictions concerning them.

4. As a thinker, Dr. Stockmann is: (Form 2)

a. _____a scientific genius
b. _____a poetic genius
c. _____brilliant but unrealistic
d. _____an eccentric
e. _____a muddle-headed fool

Scanlan called three of the choices (b, c, and d) appropriate and the other two (a and e) inappropriate. He rated the five and predicted a percentage of student responses as follows:

c. best response - 35%
b. next best - 15
d. - 15
e. - 20
a. least appropriate - 15

The relationship of this prediction to the actual response recorded from student questionnaires is noted below.

RESPONSE	DIRECTOR'S RANK ORDER	PREDICTED PERCENTAGE	NUMBER RESPONDING	ACTUAL PERCENTAGE	STUDENT RANK ORDER
c. brilliant but unrealistic	1	35%	77	49.7%	1
b. a poetic genius	2	15	10	6.4	4
d. an eccentric	3	15	11	7.1	3
e. a muddle-headed fool	4	20	1	0.6	5
a. a scientific genius	5	15	56	36.1	2

Here almost 50% of the respondents agreed with the director's top choice, but the choices of the other 50% are intriguing. Note that even though Mr. Scanlan felt "muddle-headed fool" was inappropriate he expected as much as 20% of the students to select it. In actuality only one out of 155 respondents did. On the other hand the response he labeled as "least

appropriate" (a scientific genius) got the second highest number of responses. This and the choice Scanlan designated as "best" accounted for over 85% of all the responses. It is probable that, for this question, many of the discrepancies between the predictions and the actual responses can be explained by the likelihood that the terms used in the question had different connotative weights in the minds of the director and the students. And it should be noted that 63.2% of the students made an "appropriate" response which is about what Scanlan expected.

4. As a man, Dr. Stockmann is: (Form 4)

   a. _____courageous
   b. _____foolhardy
   c. _____self-sacrificing
   d. _____self-centered
   e. _____generous

In assessing this question Mr. Scanlan described responses a, b, and d as "acceptable" and c and e as "less acceptable." His rank ordering and predictions on percentages and the actual percentages of student responses are as follows:

RESPONSE	DIRECTOR'S RANK ORDER	PREDICTED PERCENTAGE	NUMBER RESPONDING	ACTUAL PERCENTAGE	STUDENT RANK ORDER
a. courageous	1	40%	74	57.4%	1
d. self-centered	2	20	8	6.2	4
b. foolhardy	3	20	5	3.9	5
e. generous	4	10	10	7.8	3
c. self-sacrificing	5	10	32	24.8	2

The relationship of the student responses to the director's predictions is amazingly similar to the relationship in the previous question. Again, Scanlan has not anticipated the strong response to the least acceptable choice but a sizeable majority of students (67.5%) have chosen "acceptable" responses. What is interesting here is the fact that Stockmann's egotism and bullheadedness apparently did not strike students as being dominant characteristics even though the director considered them so. This observation is somewhat reinforced by student responses to the next question.

4. In holding a public meeting to publicize the poisoned water at the Springs, Dr. Stockmann was behaving: (Form 6)

   a. _____courageously
   b. _____foolishly
   c. _____public spiritedly
   d. _____egotistically
   e. _____idealistically

In reviewing the fourth question on Form 6 with Mr. Scanlan we decided that it was ambiguously worded, and so we created Form 6A.

4. In deciding to call a public meeting to publicize the poisoned water at the Springs, Dr. Stockmann was behaving: (Form 6A)

a. _____courageously
b. _____foolishly
c. _____public spiritedly
d. _____egotistically
e. _____idealistically

This change in wording focused the students' attention on the doctor's decision rather than his actions at the meeting. Mr. Scanlan did not predict a percentage of responses on this item. Instead, he predicted the rank order the students would give to the responses (all of which are acceptable, according to Scanlan) and then described the rank order he would give. The director's predictions and opinions are listed below next to the actual responses we collected.

RESPONSE	DIRECTOR'S PREDICTION OF STUDENT RANK ORDER	ACTUAL STUDENT RANK ORDER	NUMBER OF RESPONSES	PERCENTAGE OF ACTUAL RESPONSES
a. courageously	1	1	52	40.0%
e. idealistically	2	3	24	18.5
c. public spiritedly	3	2	39	30.0
d. egotistically	4	4	8	6.2
b. foolishly	5	5	7	5.4

RESPONSE	DIRECTOR'S PERSONAL RANK ORDER	ACTUAL STUDENT RANK ORDER	PERCENTAGE OF ACTUAL RESPONSES
e. idealistically	1	3	18.5%
d. egotistically	2	4	6.2
c. public spiritedly	3	2	30.0
a. courageously	4	1	40.0
b. foolishly	5	5	5.4

In this instance Mr. Scanlan was quite accurate in his rank order prediction and apparently expected that students would not pick "egotistically" even though as a director he personally believed this was a strong motivation for Stockmann's action.

Out of curiosity we tabulated the responses to the earlier form of the question (Form 6) which we had decided was ambiguous because it could refer either to the doctor's actions before the meeting or during the meeting. The actual student responses were very similar to those for Form 6A except, curiously the rank order of "idealistically" and "public spiritedly" were reversed:

	FORM 6			FORM 6A		
RESPONSE	RANK ORDER	NUMBER OF RESPONSES	PERCENTAGE OF RESPONSES	RANK ORDER	NUMBER OF RESPONSES	PERCENTAGE OF RESPONSES
a. courageously	1	61	44.8%	1	52	40.0%
e. idealistically	2	35	25.7	3	24	18.5
c. public spiritedly	3	29	21.3	2	39	30.0
d. egotistically	4	8	5.9	4	8	6.2
b. foolishly	5	3	2.2	5	7	5.4

What is intriguing here is that we would have expected a slight increase in the choices "foolishly" and "egotistically" if some of the students had the doctor's actions during the meeting in mind. In fact a smaller percentage made these choices for the ambiguous form of the question.

There were only two questions on Forms 3, 5, and 7; the first was merely a triggering question for the second which called for an open-ended response. It will be easiest to discuss each of these forms separately.

The questions on Form 3 were as follows:

1. Suppose Dr. Stockmann and Mayor Stockmann were running for mayor, which of these two men would you vote for?

   a. _____Dr. Stockmann
   b. _____Mayor Stockmann

2. Would you have any reservations about how the man you chose above might conduct himself in office? If so, what kinds of reservations? (Write your opinions in the spaces provided.)

   a. _____no reservations
   b. _____reservations such as: _____

The first question is almost identical to the first question on Forms 2, 4, 6, and 6A and the director's prediction of 80% for Dr. Stockmann and 20% for the mayor remained the same.* The actual percentage of responses on this form alone were: 95.4% for Dr. Stockmann and 4.6% for the mayor. An interesting curiosity is the fact that not one girl out of a total of 93 cast her vote for the mayor.

Mr. Scanlan said he would like to have seen 95% of the students say they had reservations but felt he could only realistically expect that 80% of them would. He realized that most of the open-ended comments would be very general and not point to specific character traits, but he hoped that those which actually did would cite reservations such as:

1. For Dr. Stockmann: his undemocratic sentiments or his lack of organization.
2. For Mayor Stockmann: his catering to special interests or his lack of compassion.

Apparently Scanlan was not realistic enough. Only 47.4% of the respondents said they would have reservations about their choice. Six of the seven boys who selected the mayor expressed reservations. Of these six, two cited his excessive self-interest, another his irresponsibile behavior, and a fourth, his sacrifice of morality for expediency. The fifth writer

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*The responses on Form 3 were averaged in with the responses on Forms 2, 4, 6 and 6A reported above.

misunderstood the question and cited reservations about Dr. Stockmann that led him to choose the mayor, and the sixth jokingly wrote in "reservations for Holiday Inn on Saturday, March 22."

Of the 21 boys and 45 girls who followed their choice of Dr. Stockmann with a comment, ten boys and 32 girls misunderstood and cited qualities they liked about Stockmann. Of the remaining 24 responses the following negative characteristics were mentioned:

Quality	Times mentioned		
	Boys (N=11)	Girls (N=13)	Total (N=24)
Lack of organization, impulsiveness, reliance on emotions	4	7	11
Undemocratic sentiments, indifference to the majority	3	4	7
Radical views	3	2	5
Too idealistic	2	2	4
Too impractical	1	2	3
Too self-centered	2	1	3
Dishonest	-	2	2
Inexperienced	1	-	1

The totals sum up to more than 24 because some students cited more than one negative characteristic.

An assessment of the responses to this question leads to three generalizations. 1) The question itself apparently did not provoke the kinds of responses we hoped it would. When close to 2/3 of the students who make comments misunderstand the directions, something is wrong and it can be assumed that some of the people who checked "no reservations" did so because they didn't understand what was being asked for. 2) Even granting the question's shortcomings, it is disappointing that so few students took the opportunity to express some reservations. This would indicate that many youngsters failed to see significant flaws in Stockmann's character and that the director and/or author had not made them feel uncomfortable with the hero. Or it suggests that over half the students have not learned to pick up nuances of interpretation and characterization in the theatre. 3) On the other hand, those students who have developed this skill apparently have keen perceptions for (with the exception of the two people who cited Dr. Stockmann's lack of honesty) their observations are valid and support the expectations of the director.

The questions on Form 5 were as follows:

1. If you were having a party at your house and had to choose between inviting Dr. Stockmann and Mayor Stockmann, which of these two men would you choose <u>not</u> to invite?

a. _____Dr. Stockmann
b. _____Mayor Stockmann

2. What characteristics of the two men led you to the choice you made?

The first question here is a little different from question #3 on the earlier forms and Mr. Scanlan predicted that 10% would choose not to invite Dr. Stockmann, 90% would snub the mayor. He said he would hope for an even larger percentage (20%) to decide against inviting the doctor. In identifying the characteristics he hoped perceptive students would cite, Scanlan felt the mayor's coldness should be the most frequently mentioned trait followed by his egocentricity. He said the objectionable traits of the doctor which students might most legitimately point to are his egocentricity and his tendency to talk too much.

In this case the students' response was closer to what Scanlan hoped for than to what he predicted; 17.6% chose not to invite the doctor. Once again the boys were less enarmored with the hero than the girls; 14 out of 58 (24.1%) of them checked the doctor rather than the mayor whereas only 12 out of 90 girls (13.3%) did so. There were indications in the open responses to the second question that the negative phrasing of the initial question (". . .which of these two men would you chose not to invite?") misled a few of the students, but it would seem safe to assume that at least 15% of the respondents meant to exclude the doctor from their party.

Only nine (6.1%) of the 148 student respondents failed to make some comment in answer to the second question. However, as we anticipated, a great many of the comments were very general and not related to each individual's acceptability at a party. In trying to match student feelings against Mr. Scanlan's predictions we eliminated comments like "Mayor Stockmann was a greedy man and wanted everything for himself whereas Dr. Stockmann wanted to do things for the betterment of the people," because it seemed clear the student was rejecting the mayor for his overall political attitudes rather than for a personal characteristic which would make him unwelcome at a party. On the other hand we included comments like, "The mayor was a hypocrite and a person who could not do what his own mind told him," because this might possibly be a personal as well as political characteristic. Fortunately, these weren't the only kinds of responses we had to chose from. Some came directly to the point: "Mayor Stockmann doesn't eat or enjoy eating very much. He doesn't laugh very often. Dr. Stockmann would be more fun at a party." All told, we ended up by including only 74 student forms in the tally on the following page.

Objectionable Traits of the Mayor	Times Mentioned		
	Boys (N=17)	Girls (N=50)	Total (N=67)
Generally cold: pompous, stiff, dull, humorless, unfriendly	9	11	22
Generally unpleasant: mean, grouchy, negative attitude	3	16	19
Self-centered	4	14	18
Conservative opinions, closed mind	4	8	12
Conservative way of life: habits, tastes	1	9	10
hypocritical, dishonest	3	7	10

Objectionable Traits of Dr. Stockmann	Times Mentioned		
	Boys (N=3)	Girls (N=4)	Total (N=7)
Hyper-critical, out to make trouble, bullheaded, harsh	1	3	4
Radical views	1	1	2
Tactless, irrational	-	1	1
Self-centered	1	-	1

Mr. Scanlan seems to have been quite accurate in his predictions about the mayor, but once again it appears that students were not quick in noting complexities and flaws in the doctor's personality.

The questions on Form T are as follows:

1. If you were the chairman of a committee making recommendations about a new school curriculum, would you rather have Dr. Stockmann on your committee or his brother, the mayor?

   a. _____Dr. Stockmann
   b. _____Mayor Stockmann

2. What characteristics of the two men led you to the choice you made?

Director Scanlan's predictions concerning the response to question 1 were that 95% would choose Dr. Stockmann, 5% the mayor. He said he would like to see a little less of an overwhelming choice for the doctor, perhaps only 80%. In the open-ended responses he hoped some students would cite specific characteristics which reflected Dr. Stockamnn's progressiveness or the mayor's sense of orderliness and political tact.

The actual tally of responses is about as close as it could be to the director's prediction. Only five people (again all boys!) out of 145 (3.4%) chose Mayor Stockmann in preference to the doctor; two others refused to make a choice, and a third wrote in that she didn't understand the questions. All the rest (94.5%) chose Dr. Stockmann. A tally of their reasons for choosing the doctor is listed below.

Positive Qualities of Dr. Stockmann	Times Mentioned		
	Boys (N=52)	Girls (N=93)	Total (N=145)
Honesty, sense of fair play, lack of self interest, concern for the common good	23	37	60
Independence, ability to stand up for what he believes, courageousness, outspokenness	16	39	55
Progressive or liberal attitudes, openness to change	11	16	27
Intelligence, ability to generate good ideas, reasonableness	-	10	10
Human understanding; interest in other individuals	3	6	9
Vague miscellaneous statements	2	9	11

In addition, 39 of the students commented in some way about the unacceptability of the mayor.

Of the five boys who chose the mayor, four cited his political tact, know-how or realism; the fifth said he seemed intelligent. Two of the five pointed to flaws in the doctor.

Again, the responses seem to indicate that the students were less aware of the doctor's shortcomings than Scanlan would like them to have been even though he was very accurate in his predictions about their response.

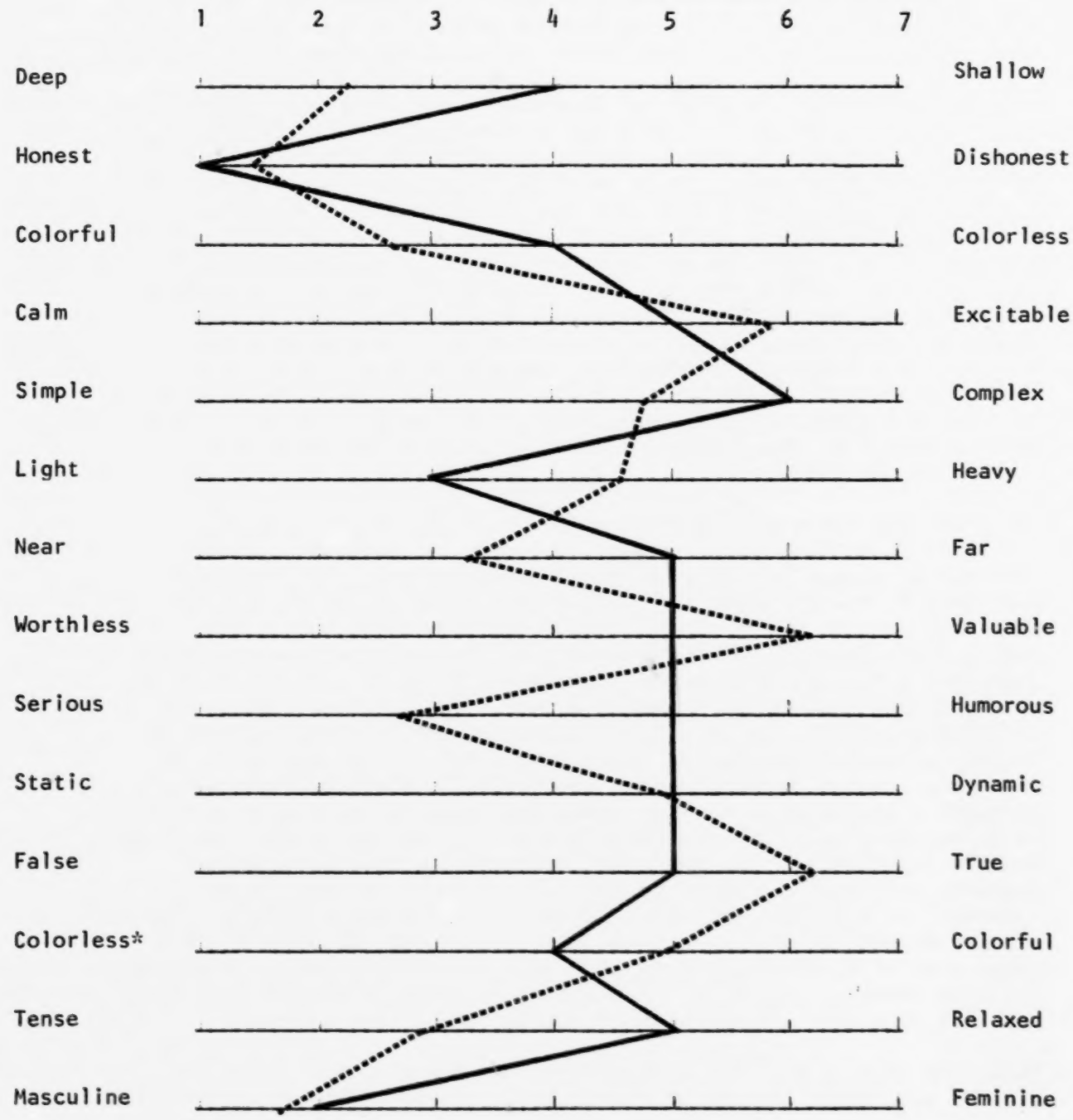
Form 1 was the only one which Mr. Scanlan did not make any predictions about. It is a semantic differential scale which we used as a means of measuring student responses against those of the author/director. The students were asked to think about Dr. Stockmann in the production of An Enemy of the People they just saw and mark where they would place him on the line between each pair of opposite words. The directions concluded: "A mark in the center space means that you cannot decide between the two words, that you find the pair of words totally inappropriate, or that you don't know what the words mean.... This is not a test and there are no right or wrong answers." One hundred thirty-four students completed the form and their responses were averaged and plotted on a graph which appears on the following page. The vertical lines on the graph represent the spaces on the questionnaire form and are numbered 1-7. Mr. Scanlan's response to this same form is also plotted on the graph.

The graph may serve as a summary to the entire study. There is considerable correspondence between director and audience; in only four out of eleven instances do their judgments about Dr. Stockmann veer toward opposite choices (on three additional occasions Scanlan chose the neutral fourth space). Likewise, there has been a considerable correspondence between the audience responses we measured (both overt and written) and those Mr. Scanlan anticipated. On the whole he made accurate predictions of audience reactions. However, there are strong indications that he did not fully succeed in conveying some of the key concepts he wished to convey about the central character, Dr. Stockmann. He saw Stockmann as a complex individual, fallible as well as heroic, laughable as well as appealing, egoistic as well as altruistic. It is interesting to note on the semantic differential graph that though Scanlan indicated Dr. Stockmann was more complex than his student audience did, he did succeed somewhat in that the students favored "complex" as a choice a bit more strongly than they did "simple." He was not as successful, however, in making the students sense the humorous side of Stockmann's personality or, in a similar vein, in making him seem somewhat "light" or "relaxed." In short, Stockmann apparently remained more of a stereotype than Scanlan would have wished.

There are several possible explanations for the discrepancy between the student audiences' concept of the central character and the author/director's concept. First, the director may have overestimated the sophistication of the students and had his characters underplay certain subtle traits

A COMPARISON OF MEAN STUDENT RESPONSES WITH THOSE OF THE DIRECTOR, DAVID SCANLAN

DR. STOCKMANN IN THIS PRODUCTION OF AN ENEMY OF THE PEOPLE



* This item was intentionally repeated as a means of checking the consistency of the responses.

..... Students

——— Scanlan

that needed greater emphasis. Or perhaps the actor who played Dr. Stockmann did not have as complex a personality in mind as the director did. A third possibility is that Ibsen created a much stronger stereotype than Scanlan realized either as translator or director and the character's speeches themselves belied the complexity of personality which Scanlan felt was there. Or perhaps a combination of these factors were operating. From the evidence we have, it seems that a lack of sophistication on the part of the students was the strongest deterrent to the director's being completely successful, but it is quite probable that the other factors contributed somewhat to the more stereotyped view of Stockmann that our instruments indicate the students had. Should a study of this nature be undertaken in the future, we recommend that better measures be taken to control for the variables of audience sophistication and actor's interpretation. Then, perhaps a more conclusive summary would be possible.

PART THREE

Studies of Student Reaction to Interracial Theatre Productions in Los Angeles

PREFACE TO THE STUDIES OF STUDENT REACTIONS TO INTERRACIAL THEATRE PRODUCTIONS IN LOS ANGELES

The multiethnic dimension of the Inner City Cultural Center's theatrical productions, and the effects of this feature of the productions upon the Project in Los Angeles are thoroughly discussed elsewhere in this report. The educational uses of interracial theatre have been discussed, and the ginger avoidance of the fact of interraciality by Los Angeles educators and curriculum writers has already been commented on as well. So we will note here only that these studies were undertaken for the purpose of finding out whether student responses to plays were substantially influenced by the racial characteristics of the casts. The hypotheses that were tested are explained in the studies themselves, and a number of reviews of the previous experimental work in the area are presented in the course of our reporting.

During the 1969-70 school year a total of seven studies of responses to interracial casting were planned. Five of them are reported in the following pages. Another is reported in the "Reactions" volume, since it deals with value judgments about the effects of the interraciality of the ICRC upon the Project as a whole. The final study--of student responses to the performances of "The Bald Soprano" that toured the schools--could not be completed because of scheduling conflicts, and the responses that were collected before the study was cancelled are reported along with other student opinions in the "Reactions" volume. The reader is also referred to in the study of "Student Objectives for Drama," earlier in this volume, which, among other things, compares the objectives held by white and black students and is relevant to the questions asked in the investigations reported in this section.

If a single statement about the findings of this series of studies were to be demanded, it would have to be this: the presence of minority performers is important to minority students, but most white students display little reaction, one way or another, to racial mixing in the casts of plays.

We think that the techniques used in the three studies of preferences for actors of different races and the set of photographs used in the study of student responses to dramatic situations of different racial compositions are very promising and, perhaps, generally useful research tools. We have already undertaken replications of the latter study, and we intend to pursue this line of research outside of the context of the Project, since the questions at issue are vitally important, and the means of investigating them devised for these studies are potentially fruitful.

REVIEW OF LITERATURE ON PREJUDICE, IDENTIFICATION, INTERRACIALITY, AND ATTITUDE CHANGES

Gary Siegel

This general review of the research literature on race was done for three reasons. First, it was done in order to put the unique social objectives of the Inner City Repertory Company into a broader social psychological perspective. Second, it was done to serve as a theoretical and practical framework for the empirical studies carried out concerning these objectives. And, finally, we intended it as helpful background to possible follow-up research on the results of our finding in these studies.

The literature that was reviewed was divided into four sections: 1) general background research on racial prejudice as a social reality in the United States; 2) available research on black identity in the face of the current black "revolt"; 3) social psychological research on the relation between racial attitudes and interpersonal perceptions; and 4) research relating to attempts to reduce racial prejudice.

General Background

Ethnic prejudice, especially prejudice of whites toward blacks, is deeply seated in the American culture (Raab and Lipset, 1959). Outside of sporadic attempts at black assimilation, it is a white culture in which the mass media and most of the literary and artistic output is characteristically white (Zubin, Eron, and Schuman, 1965). Beyond this, black and white have become socially charged symbolic referrents: white consistently having positive connotations; black consistently having negative connotations (Caldwell, 1969).

Ethnic prejudice is a problem rooted in the social organization and practices of the society and not in the unique problems or pathologies of individuals (Clark, 1955; Pettigrew, 1959). It begins in the very young (Goodman, 1952; Taylor, 1966) and emerges, not by personal contack with persons of other races, but by contact with the prevalent attitudes toward those races (Stevenson and Stewart, 1958; Morland, 1958, 1962). Anti-black attitudes have acquired a normative character among Americans (Sherif, et al., 1961; Kerner, et al., 1968). They are reinforced both by the socio-economic gain and by the vicarious

ego enhancement they bring to those who manifest them (Bernard, 1958; Herr, 1959; Rosen, 1959).

Most investigations reveal that Americans with a high level of formal education are less prejudiced than those who have little such education. Bettelheim and Janowitz (1964) point out that

> on the basis of some 25 national sample surveys since 1945, the positive effect seems to be real, not spurious. The lower levels of prejudice among the better educated seem to involve the social experience of education specifically and not merely the sociological origins of the educated (p. 18).

Researchers have commonly found that whites of low socio-economic status are most likely to have unfavorable attitudes toward blacks (Bettelheim and Janowitz, 1964; Williams, 1964). These individuals constitute the hard core of resistance to desegregation and "civil rights" (Killian and Haer, 1958; Tumin, 1958; Pettigrew, 1959).

Research on the effect of sex differences upon interracial attitudes is conflicting. Pettigrew (1959), for example, reported that women in the South are significantly more prejudiced than are males in the South; while he found no significant differences between sexes in the North. Bogardus (1959) also reported that women show more social distance toward blacks than do males. Dentler and Elkins (1967), on the other hand, in a study of northern elementary schools, found girls at all age levels more accepting of diverse ethnic groups than boys.

Taken together, the findings on the role of religious background in the development of ethnic attitudes do not provide any consistent picture. The most frequent pattern indicates that Jews and those with no religious affiliation are least prejudiced (Allport and Kramer, 1946; Bettelheim and Janowitz, 1950).

Research has supported the belief that Southern whites are considerably more prejudiced toward blacks than are Northern whites (Hyman and Sheatsley, 1956; Pettigrew, 1959; Prothro, 1952). It has also been shown that these attitudes toward blacks in the South have been remarkably stable, even in periods of rapid social change involving some desegregation (Young, Benson, and Holtzman, 1960).

Through continuous research since 1925, Bogardus (1925, 1947, 1958) has shown whites of all regions place great social distance between themselves and blacks. These studies do indicate, however, a gradual lessening of social distance. The series of Princeton studies (Gilbert, 1951; Karlins, Coffman and Walters, 1969) also indicated improvements in the perception of ethnic groups. These studies, along with other recent research (e.g., Second and Backman, 1964; Bettelheim and Janowitz, 1964), may be taken as signs of a general broadening and liberalization of racial attitudes among whites. At the same time,

there is evidence that some of what appears to be a growing white acceptance of blacks may only be a camouflaged paternalism (Katz and Cohen, 1962).

Black Identity

Recently a new awareness of black attitudes toward whites, as well as a changing of black self-attitudes, has come with the national ferment concerning race and the changing status of the black. Black self-assertiveness has become increasingly visible in the non-violence movement, in headline-making riots, and in declarations of Black Power, as well as in the growing pride in being black.

The black revolt has been moving at such a high speed that it has not only outdated much previous research, but has also outpaced white abilities to adjust to a new condition in which blacks are no longer passive recipients of white judgments and attitudes (McDowell, 1967). Much has been written concerning the nature of prejudice, and there has been considerable scholarly research on white prejudice toward blacks. There also have been some empirical investigations of the effects upon the personality development of young blacks of their membership in a minority group (e.g. Hagstrom, 1964; Kvaraceus, 1965). However, empirical studies on the specific subject of black attitudes toward whites and on the effects of the black revolt upon the identification processes of young blacks have been few and scattered, and since they vary so in methods, times, places, and populations, it is not surprising they yield differing, sometimes even contradictary results.

Research in the 1950's consistently showed blacks in the U.S. confirming the "identification with the aggressor" theory popular in the '40's (Lewin, 1941; Bayton and Byrne, 1947). It showed young black children resisting identification with their own racial groups, seeking to shed their identities (Deutsch, et al.,1956). It found that they more frequently chose white over black playmates (Stevenson and Stewart, 1958); that they prefered the skin color of the culturally dominant white race (Clark and Clark, 1947; Goodman, 1952); that they tended to assign negative roles to children of their own race (Stevenson and Stewart, 1958). Such tendencies were found to persist into late adolescence and early adult life. Black college students tended to reject ethnocentric and anti-white ideologies and to accept authoritarian and anti-black propositions (Steckler, 1957). Steckler interpreted the data to indicate an attempt by the middle class to identify with stereo typed white middleclass values and to dissociate itself from other blacks.

Research in the 60's, while it brought some confirmation of earlier work, began to find ambivalences between anti- and pro- black identities and, frequently, rejections of the old pro-white identification processes, which reflected changing behavioral orientations in a time of increasing black pride.

There is evidence that identification-with-the-agressor tendencies do persist in some forms among some segments of the black population. Katz and Benjamin (1960), for example, in a study on the "effect of white authoritarianism in bisocial groups" found that blacks who actually did as well as white teammates on mental tasks perceived their own performance as inferior. The investigation, however, failed to account for variations in attitudes on the basis of various background factors. This failure is not untypical of the lack of empirical rigor in studies of black populations. Bayton, et al. (1965) found that blacks stereotyped themselves when asked to distinguish personality traits of the "average black man and woman." Although this latter study begged the question a great deal, it does show the lingering presense of a history heavy with subordination.

Asher and Allen (1969), among others (Greenwald and Oppenheim, 1968; Pettigrew, 1967; Morland, 1965), have replicated earlier racial preference studies (cf. Clark, 1947) and have obtained similar findings. They have found black children prefering the skin color of the cultural dominant white race. However, they also found that this tendency lessened as the child got older, and that children from "Black Muslim" homes didn't show a white-preference at all. Dentler and Elkins (1967) also found that black students, as well as white students, were consistently prejudiced toward disapproval of blacks and preference for whites. They, like Asher and Allen (1965), found this tendency to diminish as the child became older. It is apparent that the present generation of young blacks have some access to positive attitudes relating to their identity as blacks ("black is beautiful"), if not in their homes, at least in the larger social situation. They still find themselves, by and large, in the same socially subordinate roles experienced by their parents. But, at least by the time they have reached the 3rd or 4th grade, they have also been exposed to strong black-pride influences, disconfirming traditional stereotypes (Roth, 1970).

In a study in 1968, McPartland found that black children reported levels of self-esteem as high as whites. He interprets events since the 1954 Supreme Court civil rights decision as having profound effects on racial pride and a new racial identity and self-esteem. McPartland cites such things as the civil rights movements, the emergence of new African nations and black world leaders, and the riots in American cities, as important elements in the development of black pride and rising self-esteem.

In 1962, Derbyshire and Brody studied black college students using social distance techniques and found a basic ambivalence regarding their black identity. They found the students uncertain as to what constituted the entity "Negro." They also found what they thought was a basic identity-conflict in the students which they interpreted by postulating the presence of a personal and a social identity. Two years later, in 1964, the same two investigators again conducted a study of black collegians. They found an almost total rejection of

the American Negro folk stereotypes and interpreted this as an indication of a newly-emerged black identity. These students rejected stereotypes concerning. the segregation of black housing; inability of blacks to be leaders; segregation in employment; blacks as manual laborers; and keeping blacks in a socially subordinate position. The authors saw the rejection of these forms of stereotyped behavior patterns as emancipating these students from a subordinate social identity. No longer did they see themselves in the role of "subjugated blacks."

Kirkhart (1963) conducted a study on minority group identification and group leadership. 47 black male college students were administered a measure of black in-group identification and made sociometric leadership nominations. The hypothesis tested was that group members nominated for "external system" leadership situations would tend to be majority group strivers. The hypothesis was not confirmed. The nominated leaders were found to be highly identified with their black group.

Maliver, (1965) tested the identification-with-the-agressor hypothesis among both Northern and Southern black males, and concluded that his data did not support the theory.

Johnson (1966) investigated the racial attitudes of a group of black children and teenagers who were participating in a "Freedom School" where they were being taught black history. His results indicated that the group held high positive conceptions toward black identity. The group also perceived "most whites" as having negative attitudes toward blacks. Johnson concluded from his study that the institution of the teaching of black history in the American educational system would be the most practical, effective and rapid method available for changing the self-concepts of American blacks.

Georgeoff (1967) studying the effects of the inclusion of a black history course in the fourth grade curriculum found it substantially beneficial in the improvement of both the black and white child's self-concept, besides reducing the interracial cleavage in the school.

In a supplemental study for the National Advisory Commission on Civil Disorders, Campbell and Schuman (1968) reported a number of significant findings in relation to black self-concept and interracial attitudes. They found a large percentage of blacks subscribed to an emphasis on "black consciousness" that was "almost unthought of a few years ago." Forty-two per cent of their sample endorsed the statement: "Negro school children should study an African language." The authors suggested that attempts to emphasize black consciousness without rejection of whites may have wide potential appeal among blacks, and that a substantial number of blacks want both integration and black identity. The study found that about a third of the black sample saw most whites as well-intentioned, another third saw whites as clearly hostile and repressive, and the remainder saw whites as simply indifferent to the situation of the black. A large percentage of blacks interviewed (4

out of 5) believed it was possible to get ahead in spite of prejudice and discrimination. The belief that no matter how hard a black works he cannot succeed in American society was found strongest among the less educated, especially among those with less than 12 years of education between 20 and 40 years of age, while faith in success through hard work is most typical among black male college graduates.

In a study dealing with interracial attitudes of black youth in Washington, D. C., Sophia McDowell (1967) found, in agreement with other research on this question, that black willingness to associate with whites was higher than she had expected. This willingness to associate was not extended equally to all whites or in all situations, but varied according to the kinds of whites and the kinds of situations and previous voluntary informal social contact.

Racial Attitudes and Interpersonal Perception

Our perception, as Cantril (1957) pointed out, depends on a large part on the assumptions we bring to any particular occassion. It is not a "reaction to" stimuli in the environment but may be more accurately described as "a transaction with" an environment. This implies that the meanings and significances we assign to things, to symbols, to people, and to events are the meanings and significances we have built up through our past experience, and are not inherent or intrinsic in the stimulus itself. In this way our perception of "reality" occurs in terms of what is important and/or useful to us.

There is a series of studies on perception which indicates that perceptual distortion is inversely related to the importance (Ittelson and Kilpatrick, 1961; Wittreich, 1952) or significance (Wittreich and Radcliffe, 1956) of stimuli. Asthana (1960) in his study of perceptual distortions as a function of the valence of a perceived object, reported a rank order of stimuli from most-to-least-distorted: physical objects, a disliked person; a stranger, a liked person, and finally a self-image. Likewise, studies of binocular conflict have demonstrated resolution in terms of familiar stimuli (Hastorf and Myro, 1959). Bagby (1957) showed this phenonemon in a cross-cultural study of Mexicans and Americans These studies indicate that perception takes place in terms of some kind of frame of reference we bring to situations--in terms of what we come to expect is real.

McLaughlin (1966) in his doctoral research placed subjects in two member teams with an actor, half of them believing the actor was a high school dropout and half that he was a college class president. When given a partner-description adjective check list McLaughlin's hypothesis that the latter subjects would give more favorable evaluations of their partner was confirmed.

In the studies on the so-called "authoritarian personality" we see how what a person expects influences what he sees. In these studies individuals were seen to make interpersonal judgments on the basis of the

role played by the stimulus person (cf. Thibaut and Riecken, 1955).

There is a body of research in social psychology that speaks to the effects of prejudicial attitudes on interpersonal perception. In a study of the Negro stereotype, Secord, Bevan, and Katz (1956), showed photographs of blacks and whites to white high school students. They found that the assignment of stereotyped attributes was a function of whether a person was perceived as black or white and not of the degree of physical Negroidness of the picture. They found that once the categorical threshold was crossed by the perception of the photographed person as a "Negro," all the attributes of a stereotype were inferred at full strength. They also found that persons more highly prejudiced stereotyped all such photographs to a greater degree than persons less prejudiced. Secord (1959), in a follow-up study, found that there was no tendency among the subjects to reduce stereotyping when photographs were more caucasoid in appearance. Response to the photographs was found to be independent of whether the picture series was black-white or black only.

Some indications about the converse phenomenom, the minimization of differences within a group, were provided in a study by Seeleman (1940). She found that prejudiced subjects tended to be less accurate than others in recognizing individual blacks whose photographs they had previously seen. The same meaning minimization regarding Jews has been found among subjects registering high in anti-semitism (Pulos and Spilka, 1961).

The connection between interracial attitudes and interpersonal perception has been demonstrated in studies of binocular conflict. Reynolds and Toch (1965) found subjects high in prejudice tend to report more binocular rivalry and less binocular fusion when stimulus material consists of biracial stereograms than do low prejudiced subjects. Fisher (1968) in a study to measure the relative contributions which emotional loading and familiarity make in the resolution of a binocular resolving situation, found that a less prejudiced person saw less "Negroness."

A series of studies at the University of Texas under the direction of Dr. Donald Byrne, investigated various social-psychological effects of racial prejudice. Wong (1961) had subjects indicate their feelings about strangers on whom only minimal background data were provided. As hypothesized, highly prejudiced white subjects responded more negatively to a black than to a white stranger, while subjects low in prejudice did not. Byrne and Wong (1962) found that highly prejudiced white subjects assume a greater degree of attitude dissimilarity between themselves and an unknown black than between themselves and an unknown white person, whereas subjects low in prejudice do not. Of further interest in this study is the analysis of actual attitude similarity. There were no significant differences between a sample of white and black subjects on 26 items, indicating that the dissimilarity highly prejudiced white subjects perceived between themselves and blacks was a function of their prejudice.

In a study of prejudice and interpersonal expectancies by Byrne and Andres (1964), subjects were asked to describe the most probable consequences of a series of situations in which black-white interactions had taken place. The authors found that the ratio of positive to negative reinforcements expected as a consequence of black-white interactions is greater for low prejudiced than for high prejudiced individuals. Byrne and McGraw (1964) designed a study to investigate whether the reward value of attitude similarity and the punishment value of attitude dissimilarity overcame the effect of prejudice on attraction toward blacks. Subjects were asked to respond in terms of interpersonal attraction toward either a white or a black stranger whose attitudes fell at some point along a continuum from complete similarity to complete dissimilarity compared with those of the subject. The researchers found that high-prejudiced subjects responded to a black stranger on the basis of race and made little differentiation among blacks on the basis of similarity of attitudes. They tended to indicate dislike or indifference toward black strangers irrespective of their similarity to themselves.

Platt (1964) studied identification, prejudice, and selective memory among blacks. He asked subjects to read and rewrite a story containing both cultural stereotypes and positive statements of characters. He found, according to his expectations, that the blacks who displayed high identification were less able to recall stereotypes regarding the black characters than those blacks whose identification with the status of blacks was less important. High and low referent blacks (identifiers), however, were equally capable of remembering laudatory material regarding the blacks depicted in the story. The recall of material about other groups was uneffected by identification level. Platt also found that a high-prejudiced person was generally less able to recall as much of anything as a low-prejudiced person.

Physiological data supply additional sources of relevent information about prejudicial attitudes. Vedulech and Krevanick (1966) investigated the degree of "emotional support" of strong racial attitudes. They found that persons with high anti-black prejudice exhibit greater galvanic skin responses than do low-prejudice individuals to photographic stimuli with black content than to non-black stimuli. They also found a high degree of consistency between attitude-scale response, physiological responsiveness, and verbalized preferences for the photographs. Westie and Defleur (1959), working with photographic slides, also found greater autonomic activity on the part of prejudiced subjects. Cooper (1959) employing ethnic names like "Mexican", "Jews", "Swedes", and "Japanese," found that galvanic skin response magnitude could be predicted from verbally expressed likes and dislikes for these groups.

On Reducing Prejudice

The most common theoretical framework for attempts to change racial attitudes is the one that sees liking as a function of exposure. The

exposure may be interpersonal experience or it may be indirect experience, in the form of persuasive communications or commercial films. Most research has been an attempt to change white attitudes by exposure to some form of "black" stimuli.

There is fairly good evidence that familiarity per se does enhance liking, whether of popular arts material (Krugman, 1943; Krugman and Hartly, 1960), English words (Johnson, Thomson, and Frincke, 1960), nonsense syllables (Bechnell, Wilson and Baird, 1963), or passport-type photos (Wilson and Nakajo, 1965). With this wide range of materials, the more frequently the stimuli are presented, the greater the liking and positive evaluation of them. George Homans (1950) uses a form of the liking-exposure postulate as the basic element in the Human Group: the more people interact the more they will like each other.

Reduction of prejudice by white persons toward blacks has been reported to covary with increased contact between persons of different race in situations as diverse as a meat packing plant (Palmore, 1955), a housing project (Deutsch, 1951), a university classroom (Mann, 1958), and among merchant seamen (Brophy, 1956). One of the most generally familiar investigations of racial attitudes, the American soldier study (Stouffer, 1950), found that the soldiers most favorable to black-white infantry units were those in companies which already had a volunteer black platoon.

In their study of integrated housing projects, Deutsch and Collins (1951), found that white residents were more likely to hold blacks in the project in high esteem and were less likely to hold unfavorable black stereotypes. They were also more likely to recommend the integrated occupancy pattern for future projects and more likely to be favorable to blacks in general as well as the specific blacks in the project, than were whites living in the segregated area of the project. Works (1961) studying the prejudice-interaction hypothesis among blacks in an integrated housing situation found similar results of reduced outgroup prejudice.

Mann (1958) studied the effects of interracial discussion groups on racial prejudice in an attempt to replicate studies of the prejudice-interaction hypothesis under relatively controlled experimental conditions. College students were assigned to 13 six-man interracial groups who met in leaderless group discussion four times a week for three weeks. Mann found that interracial group contact reduced the tendency among the students to make friendship choices only from members of their own racial group. He also found that the black students showed an increase in awareness of the social preferences of members of their own race, and, that Southern blacks began to show a greater similarity in their racial preferences with members of their own race.

That sheer contact may be a necessary but not sufficient condition for

attraction has been shown by other investigators. Festinger, in a study in 1953, discussed an integrated housing project in which little social life existed among residents. Residents who felt "forced" to live in the project by circumstances beyond their control (housing shortage), were largely negative in their attitudes toward their community and neighbors. Likewise, Kramer (1951) and Winder (1952) found that residentiai housing situations, in which blacks are perceived as an economic or social threat by whites, can produce or, at least, reinforce, high prejudice. Gundlach (1956) found similar results in a study of labor unions.

In summary, the contact hypothesis generally appears to demand a situation of: (1) equal status of the participants in the situation; (2) contact of sufficient duration and intimacy; (3) the sanction or support of a high authority; (4) a mental atmosphere not completely negative; and especially for children, (5) a situation where positive attitudes and values developed in any interaction are not contradicted by realities of the restricted community, or overturned by strong reference group feelings at home.

Many people believe the integration of the public school system is an essential and most beneficial first step in affecting a wide-spread narrowing of the racial cleavage that is wedging the country into black and white halves. Desegregation of schools is currently being argued primarily on academic grounds. Thorough reviews of research on this aspect of desegregation have been compiled (Weinberg, 1968; Kraft, 1969; Katz, 1964; Pettigrew, 1964; Long, 1964).

Our concern in this aspect of our work on the ELT Project was to determine whether the introduction of an interracial school program might improve interracial relations. Unfortunately, there is a shortage of good longitudinal studies on such programs. And among those which have been carried out it is not uncommon to find that they have been marred by such gross faults as the equating of unsegregated schools with desegregated schools. One thorough and often cited longitudinal study on desegregation is Dorothy Singer's (1967). She compared the racial attitudes of white children in two fifth-grade classes, each from a neighboring suburb of New York City. One class attended a school in a community that had ended segregation 13 years earlier, and in which integration was established in the very best sense of the word (that is, proper ratio of black to white students in class, directed emphasis on interracial cooperation, etc.). The second group of fifth-graders attended an all-white school in a community that was comparable except for the fact that it had no "negro problems," since black families were almost nonexistent. Singer found support for the general notion that white children with several years of integrated classroom experience would have a more differentiated view of blacks than would white children with no such interracial experience. High-exposure students showed significantly more positive attitudes toward blacks than did low-exposure students, as well as a willingness to have greater proximity with blacks, particularly in terms of personal friendship, and also greater familiarity

with and positive feeling for black celebrities. Singer also found that black students with high exposure to whites had a more differentiated cognitive structure than low exposure students, being more willing to designate white children as "sloppy" and "snobbish," while still holding positive attitudes toward them.

Singer also attempted to study the influence of intelligence in shaping ethnic attitudes, and to ascertain the influence of the interaction between intellectual capacity and interracial proximity. She found that where there is contact with blacks, I.Q. plays the role of a "sensitizer" and, generally speaking, the higher the I.Q. the more differentiated the response. Where there is no contact, as is the case with low exposure groups, there is nothing, in effect, to differentiate. On her attitude scale, the high exposure, high I.Q. students were significantly more favorably disposed toward blacks and foreign nationalities.

Campbell (1958) tested a group of white high school students on attitudes toward blacks just before and six months after school integration. He found that a change toward more favorable black attitudes was a function of classroom contact and friendship with blacks. Some white students became less prejudiced, while others became more prejudiced. Perhaps of greater significance is Campbell's finding that the direction of attitude change (less or more prejudiced) was related to how his subjects perceived the racial attitudes of their parents and friends.

Webster (1961) studied attitude change among both white and black students in an integrated junior high school in California. Both groups were tested by means of social-acceptance scale and a sociometric test, first in their separate schools and then in the integrated school some six months later. It was found that white students accepted blacks less following integration and that black attitudes moved toward the extremes but with more changing in the favorable than in the unfavorable direction.

A major problem in looking for solutions to racial prejudice in terms of exposure in integrated classrooms is the fact, as Coleman (1966) reports, of the lack of integration in U.S. school systems. Ausubel (1968) adds that we cannot expect immediate results even with integration with our history of prejudicial attitudes and, in many cases, enviromental forces to counter-act. In some cases, desegregation has only meant a different form of segregation, with black students being isolated in the school itself (Hall and Gentry, 1969). In a study of Northern school desegregation, Dentler and Elkins (1967), concluded that success depends heavily on thoughtful and well-planned staff responses aimed at interrupting the "ecological reinforcements" of status quo attitudes. Georgeoff (1967) argues that in most cases integration in schools is not enough because of the persistence of ipso facto segregation. He opts for an educational program along with integration. It is apparent from these studies, as well as others,

that in order to affect positive changes in interracial relations through a program of school desegregation in most schools, efforts must extend past simply a physical mixing of the races. Important factors that can make or break any such desegregation program include: the way classes and extra curricular activities are organized, the attitudes of teachers and school administrators, and factors external to the school, such as community atmosphere and parental attitudes.

It is not possible to provide every white child with direct experiences with blacks. One alternative to direct experience with blacks is exposure to materials which portray blacks in a positive way, contradicting prevailing prejudices and stereotypes. Research in social perception (Allport and Postman, 1945) and in the learning of controversial material (Jones and Aneshansel, 1956) suggests that materials portraying blacks positively would be either distorted in various ways to support the prevailing stereotypes and prejudices or ignored and quickly forgotten. Research in counter-conditioning (Bandura and Walters, 1963), however, would predict that such an approach would be effective. If, for example, the stimulus "black" (which elicits a negative response) is repeatedly paired with the cluster of stimuli characteristic of "middle class" (which elicits a positive response), the stimulus "black" will elicit the positive response associated with "middle class" - if the stimulus "black" does not elicit a more powerful response than the response elicited by the stimuli characteristic of "middle class."

Litcher and Johnson (1969) conducted a study of the effect of multiethnic readers upon the racial attitudes of white elementary students. In the readers used, blacks were portrayed as having middle class characteristics (works hard, dresses nicely, is clean, etc.) in integrated situations. The multiethnic readers were the only such materials in the classroom during the study. The study employed a pretest-posttest control group design. Experimental groups of second graders used the traditional reader. Each child was interviewed individually and given four tests presented randomly (Clark Doll Test, the Harowitz "Show Me" and Categories tests, and a Direct Comparison test). On all four tests, the children using the multiethnic readers responded significantly more favorably toward blacks than the children using the regular readers. The Clark Doll test showed a decrease in the preference for one's own racial groups over the other. The "Show Me" test showed a reduction of the amount of social distance placed between the white and black racial groups. The "Categories" test found the children were less apt to exclude a child on the basis of race. And the "Direct Comparison" test found they were less likely to attribute negative traits to blacks and positive traits to whites.

The use of the multiethnic reader had much the same effect on white children as learning black history had upon black children (Johnson, 1966; Georgeoff, 1969). It should be noted that the community in which the study was conducted had a small black population and so the black community probably represent no economic or social threat to the white community. The racial attitudes of the children were not

rooted in strong reference group norms.

Findings conflicting with those of the preceding were found by F. R. Blume (1967) in his doctoral research in a study of the effect of viewing photographs of blacks in negative and positive roles on subsequent judgment of an individual black by college students. He found that positive role photographs boomeranged because subject believed they were unreal.

The use of motion pictures as a propaganda technique for altering ethnic attitudes has received much attention from investigators, beginning with a study by Peterson and Thurstone (1933). By the use of films they were able to produce large pro-German, anti-Negro, and pro-Chinese shifts in attitudes among high school students; and some of these attitude changes tended to persist over time, for example, 19 months for the pro-Chinese attitude. Subsequent research on the effects of motion pictures on ethnic attitudes has been sporadic, but some important findings have emerged. Rosen (1948) found a large and significant reduction in anti-Semitism among a group of 50 Gentile college students who saw the film Gentleman's Agreement. Goldberg (1956) compared the effects of two types of films dealing with prejudice shown to two Detroit fraternal groups. Before-and-after measures on the California E scale revealed that a "general" or abstract film on prejudice had no effect on the groups who saw it, whereas the second film, involving realistic enactment of a social situation, produced a significant reduction in prejudice in four of the seven groups tested. Kraus (1960) confirmed various racial versions of a movie in an attempt to change attitudes of eleventh-grade white children toward blacks. The film dealt with the efforts of two high school teachers to get a black student into college; the versions differed only in having the teachers both white, both black, or white and black. Significantly more favorable attitudes toward blacks occurred only after the biracial version of the film.

The effects of other propaganda techniques--lectures, broadcasts, stories, etc.--on attitude change have been studied but not in recent years, and far less often than the effects of films have been studied with reference to ethnic groups. While there is some evidence that these attempts are effective in changing attitudes, the question of the durability of these changes is only problematic. Studies on the effectiveness of television are incomplete.

Rubin (1967) conducted a comparative study of two on-going attempts to reduce prejudice. The one an educational television course, the other a summer workshop. The former group of students viewed a series of weekly two hour lectures over a period of four months and held weekly one hour group meetings. The workshop covered six consecutive weeks and included seminar discussions and practical field experiences as well as a series of lectures almost identical to those viewed by the former groups. Rubin reached two conclusions after his study:

1) that a one-way impersonal form of influence (like the television course) may have relatively little value in reducing certain kinds of prejudice; and 2) that prejudicial attitudes are based more heavily upon affective factors than cognitive factors--any substantial change away from an anti-negro bias is not so much from an increase in rational outlook as in an increase in "sympathetic identification."

Allport (1958) has summed up one of the basic problems in attempting to influence racial attitudes with various forms of communication: "We ought not to expect a few detached hours of intercultural education to offset the total press of the environment. People who see a pro-tolerance film will view it as a specific episode and not allow it to threaten the foundations of the system they live in" (p. 464).

There have been some successful attempts to reduce prejudice by presenting case histories which expose some of the emotional and irritational bases of prejudice (Katz, Sarnoff and McClintock, 1956; Stotland, and Patchen, 1961). The theory here being that if someone recognizes common characteristics in a bigoted model, he may reappraise himself in order not to identify with that person. Sarnoff, Katz and McClintock (1954) found that this method, by getting at some of the affective roots of prejudice, was more effective in changing racial attitudes than rational persuasion. Stotland and Patchen (1961) and Cooper and Jahoda (1947), however, have found that persons already prejudiced did not change when presented with a bigoted model with whom they had common characteristics but instead misinterpreted the whole affair.

POSTSCRIPT

The relatively few empirical studies which we were able to conduct, and which are reported on the following pages, cannot give conclusive answers to questions about the effects of the ELT Project upon racial attitudes, perceptions of other racial groups, or self-concepts of minority students. Moreover, the studies must be interpreted in the context of the comments on the interracial dimensions of the Project that are reported in the "Reactions" volume of this report--specifically, that a result of the ICRC's interraciality was the lowering of the artistic and entertainment value of the plays.

The studies and the collected responses, however, strongly suggest that the tendencies toward reduction of white prejudice against blacks, reported in several of the studies discussed above, has continued so that race is hardly salient to a majority of the white youngsters studied in Los Angeles (though it is still important to white teachers); while at the same time something of an opposite movement has been going on in the black community, so that race has become increasingly important to black youngsters. Both the white indifference to race and the black pride in race, however, seem to predate the Project experiences and are presumably the results of forces so wide-spread and powerful that the influence of the Project itself was indiscriminable.

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STUDENTS' SEMANTIC DIFFERENTIAL RATINGS OF ELEMENTS OF AN INTERRACIAL THEATRE PRODUCTION

This study was the first in the series of studies of between-school differences in reactions to the productions that were part of the Educational Laboratory Theatre Project in Los Angeles. The schools in question had been chosen as representative of the range of schools in the district; the three schools involved in the present study were "Los Altos," which served a well-to-do white student body, "Hughes," a ghetto school with an all-black student body, and "Central," a well-integrated school of moderate socioeconomic status with a large enrollment of black and "other minority" students. The respondents were chosen, by procedures discussed below, from among those 12th grade students participating in the program, which involved bussing students during school hours to performances put on by the Inner City Repertory Company.

The Inner City Repertory Company is, as has already been noted, distinguished by its practice of casting all roles without regard to race and ethnic group membership, so that each role is, racially, independent of all other roles and a production may feature (as one did) players of four ethnic groups in the roles of the father, mother, son, and daughter of a single family.

All the studies in the series we conducted were attempting to determine whether student responses to such productions differed as a function of the characteristics of the students--race, sex, socioeconomic status, prior experience with interracial theatre, prior experience with interracial social situations, academic ability, and so on. This particular study sought especially to determine whether an interracial production of West Side Story would "mean" different things to students from three very different sorts of backgrounds.

The instrument used was a version of Osgood's semantic differential (Osgood, Suci, and Tannenbaum, 1957), which is an instrument for describing the connotative meanings of things or concepts. A semantic differential consists of a concept to be rated and a set of scales upon which to rate it. There may be any number of scales on any particular semantic differential, each of them consisting of a seven-point rating scale connecting two bipolar adjectives. The respondent is to rate the concept on each of the scales in turn by selecting a point on the seven-point scale.

The two-scale example below calls for the respondent to rate the concept mother. The first scale consists of the adjectives good and bad. An X marked in the space nearest good indicates that, to the respondent, the concept "means" extremely good or, to put it another way, that the adjective good is very closely related to the concept mother. The second scale consists of the adjectives high and low. An X marked in the center space indicates that, to the respondent, the adjectives are unrelated to the concept. Choices between the neutral center and the extremes indicate intermediate degrees of relatedness.

MOTHER

GOOD	I X I I I I I I I	BAD
HIGH	I I I I X I I I I	LOW

In scoring the semantic differential ratings, one may consider the neutral center point as zero and assign the values +3, +2, +1, 0, -1, -2, -3 to the points on the scale; or he may assign the points the number 1 through 7. For the sake of convenience, we have used the latter procedure.

The semantic differential was chosen as one of the instruments to be used in this series of studies because (1) it is a way of describing meanings that a subject might not be able to verbalize clearly, (2) it is an indirect measure that minimizes the "Sunday School effect"--the tendency of students to give adults the socially acceptable answers--and (3) because there is a large body of work establishing that semantic differential ratings are stable within cultures while differing between cultures. (The key studies are reported or summarized in Snider and Osgood, 1969).

We wished to learn three things from this study. First, whether students discriminated between elements of a theatre production or whether the semantic ratings of production elements would actually reflect a global judgment on the whole experience. Second, whether the students from the three representative schools involved differed significantly in their ratings--whether, that is to say, they belonged to the same or to different cultures. And, third, whether ratings were related to the amount of involvement students had had with the Theatre Project. (Since all students who responded to the semantic differential were participants in the project, it was not possible to determine whether those students participating in the Project differed from their classmates who had not participated. Comparisons between participating and non-participating students were made in several of the other studies to be reported later.)

The scales that were used on the semantic differentials employed in this study had been selected originally for a study conducted a year or so earlier. The scales were chosen from among those used on the "semantic differential for theatre concepts" proposed by Smith (Smith, 1961; Hansen and Borman, 1969). In an unpublished 1968 study, Hansen found that there were significant differences between teachers and students in their mean ratings of features of an ICCC production of Macbeth. The particular version of the semantic differential used in this study, then, has been shown to be productive of meaningful factors and capable of discriminating between groups of respondents. The six concepts that were to be rated were the following:

1. This PRODUCTION of West Side Story
2. The JETS in this production of West Side Story
3. The SHARKS in this production of West Side Story
4. The MUSIC in this production of West Side Story
5. TONY in this production of West Side Story
6. MARIA in this production of West Side Story.

The six concepts were divided into two groups or forms: 1, 2, and 3, and 4, 5, and 6. Each respondent was to rate the three concepts in one of the forms. The instrument was administered in the following way. On the days that each of the representative schools attended West Side Story, a staff member randomly selected one of the buses upon which students had been brought to the theatre. A teacher chaperoning the students on each of the three buses was given a set of the instruments and asked to distribute them to the students on the bus as soon as it departed from the theatre. The set of instruments given each teacher was evenly divided between the two forms.

Each instrument was two pages long, with the second page being a heavy cardboard to make it easier for students to write while sitting on the bus. The first side of the first page contained directions and examples of how the ratings should be made. The other sides contained the three semantic differentials in the form. Students were not asked to sign their names to the instruments, but only to indicate their sex, their school, their English teacher's name, and the names of the Project plays they had seen.

Mean scores on each of the scales for each of the concepts were computed for various groupings of students: by schools, by sexes, by numbers of plays seen, by sexes within schools, by number of plays within schools, by number of plays between sexes, and by number of plays between sexes within schools. These mean scores were plotted and compared, and it was established by inspection that there were no important differences to be found; rather it

was the case that the graphs of whatever groups were being compared overlapped more often than not.

The analysis of semantic differential data has been the subject of much argument and much study (Heise, 1969; Snider and Osgood, 1969), with one of the central issues being whether the assumption of equal intervals between the points on the scale is warranted. The work of Messick (1957) indicated that one will not go far wrong in making this assumption.

At any rate, it seemed that, in the present case, there so obviously were no significant differences between groups that statistical manipulation of the data need not be worried over, since it was desirable only so that we might avoid having either to present several dozen graphs or to ask the reader to take our word that there were no large differences. Our first step was to compare the rating of the students across the six concepts, using analysis of variance procedures to estimate the reliability of the measurements (Winer, 1962; pp. 124-132). The reliability of the mean ratings on the six scales given by these procedures was $r_6 = .98$. Table 1 gives the mean ratings on which these calculations were based.

Insert Table 1 Here

On this basis, we could conclude that the students were not discriminating between, say, the meaning to them of the production and the meaning to them of the music in the production or of the characters in the production. On this basis, also, we were able to decide to present a summary of ratings of a single concept--the production itself--and allow it to stand as representative of the ratings on all concepts.

A graph of the mean ratings of the two schools between which there were the greatest mean rating differences is given in Figure 1, for the production concept. The correlation between the two sets of scores is .98. Divesta and Dick (1966) found factor mean scores for groups of children to yield test-retest correlations that ranged from .73 to .94. Norman (1959) found test-retest correlations of .96 for scale means. So the ratings differences between Los Altos, the all-white, high SES school and Hughes, the all-black, low SES school were somewhat more highly correlated than previously reported test-retest correlations of ratings by the same subjects.

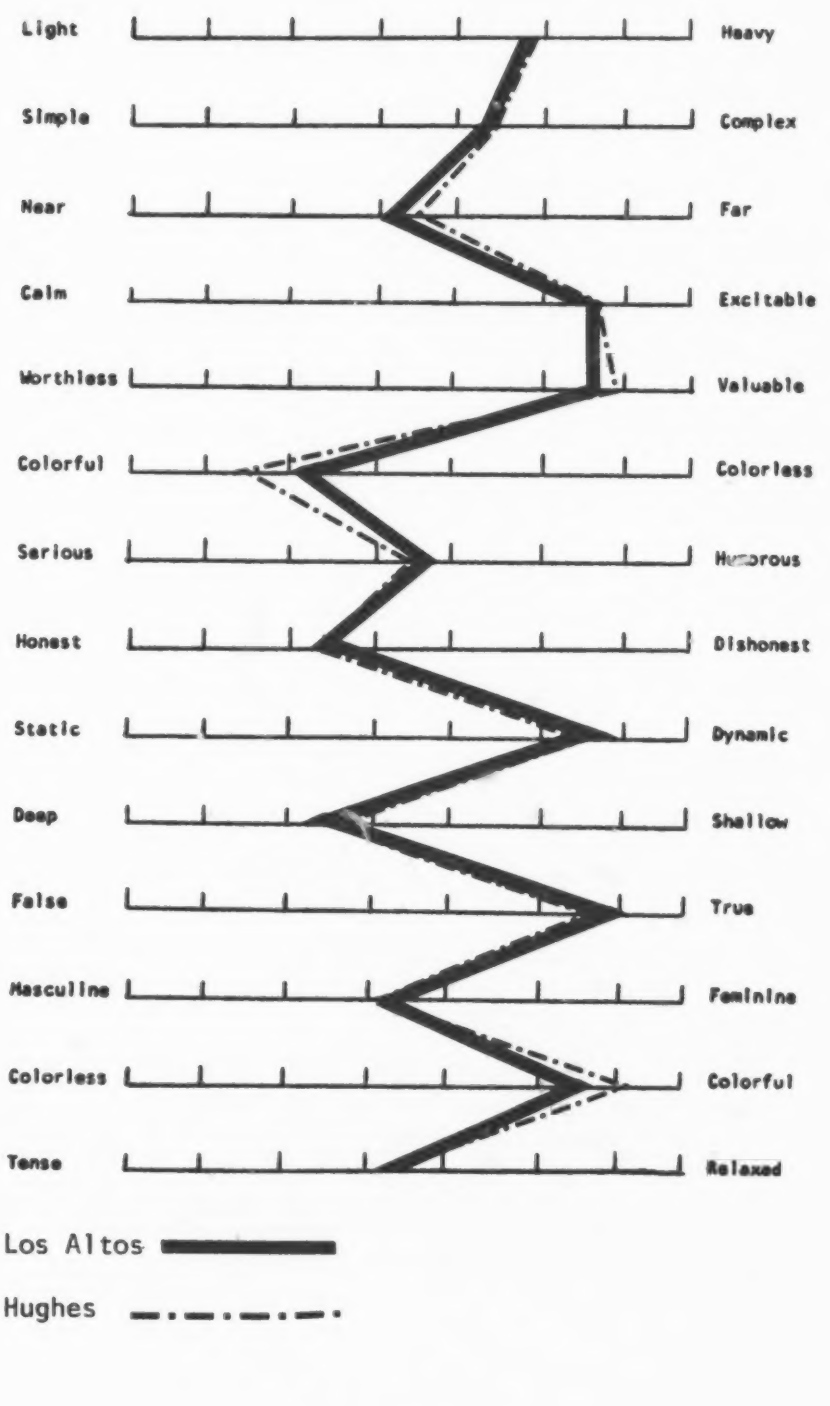
Insert Figure 1 Here

TABLE 1. Mean Ratings for All Students on Twelve Scales for Six Concepts

Scale	1	2	3	4	5	6
LIGHT-HEAVY	4.83	5.10	4.80	4.30	5.36	3.86
SIMPLE-COMPLEX	4.30	4.40	4.46	3.96	4.76	3.50
NEAR-FAR	3.30	3.56	3.40	3.36	3.16	3.66
CALM-EXCITABLE	5.76	5.86	5.20	5.13	4.93	3.90
WORTHLESS-VALUABLE	5.80	5.56	5.36	5.36	6.10	5.40
COLORFUL-COLORLESS	1.96	2.56	2.10	2.73	2.23	2.80
SERIOUS-HUMOROUS	3.40	3.63	2.80	3.20	2.30	2.60
HONEST-DISHONEST	2.30	3.10	3.03	2.83	1.86	2.13
STATIC-DYNAMIC	5.43	5.40	5.10	4.86	5.43	4.60
DEEP-SHALLOW	2.56	3.10	2.96	3.13	2.16	3.23
FALSE-TRUE	5.46	5.50	5.26	4.90	5.66	5.23
MASCULINE-FEMININE*						
COLORLESS-COLORFUL*						
TENSE-RELAXED	3.30	3.80	3.36	3.63	4.36	4.50
N =	126	133	130	138	147	146

*NOTE: These two scales were omitted from the calculations of reliability between concepts for the following reasons: (1) in the cases of the Tony and Maria concepts, the masculine-feminine scale was merely denotative and therefore large differences were introduced that had nothing to do with the psychological meaning of the concepts to the respondents; and (2) the colorful-colorless scale appears twice, having been repeated as a check on response bias.

FIGURE 1. Profiles of Semantic Differential Ratings of "This Production of West Side Story" for Los Altos and Hughes High Schools



The Inner City production of West Side Story, then, seems clearly to have "meant" the same to both these groups, and it may be surmised that the two groups do, indeed, belong to the "same culture." This covergence between two groups of students who have had widely varying backgrounds of experience, and who are commonly held to perceive and value the world quite differently, is remarkable; and the question must be asked whether the Theatre Project experience, which the two groups shared in common, might be credited with bringing about this convergence. As noted above, there were no students in the sample who had not seen at least the one play, so direct comparison could not be made between participants and non-participants in the Project. But comparisons could be made between students who had seen no plays prior to West Side Story and those who had seen a number of plays. Figure 2 graphically compares the mean ratings of students who had seen no previous productions with the ratings of students who had seen four or more productions. The two sets of ratings are correlated .98, which suggests that the convergence between school means is not attributable to the Theatre Project, but may reflect the influence of cultural values or experiences (e.g., movies, TV, rock music) which are shared by adolescents regardless of race or SES level.

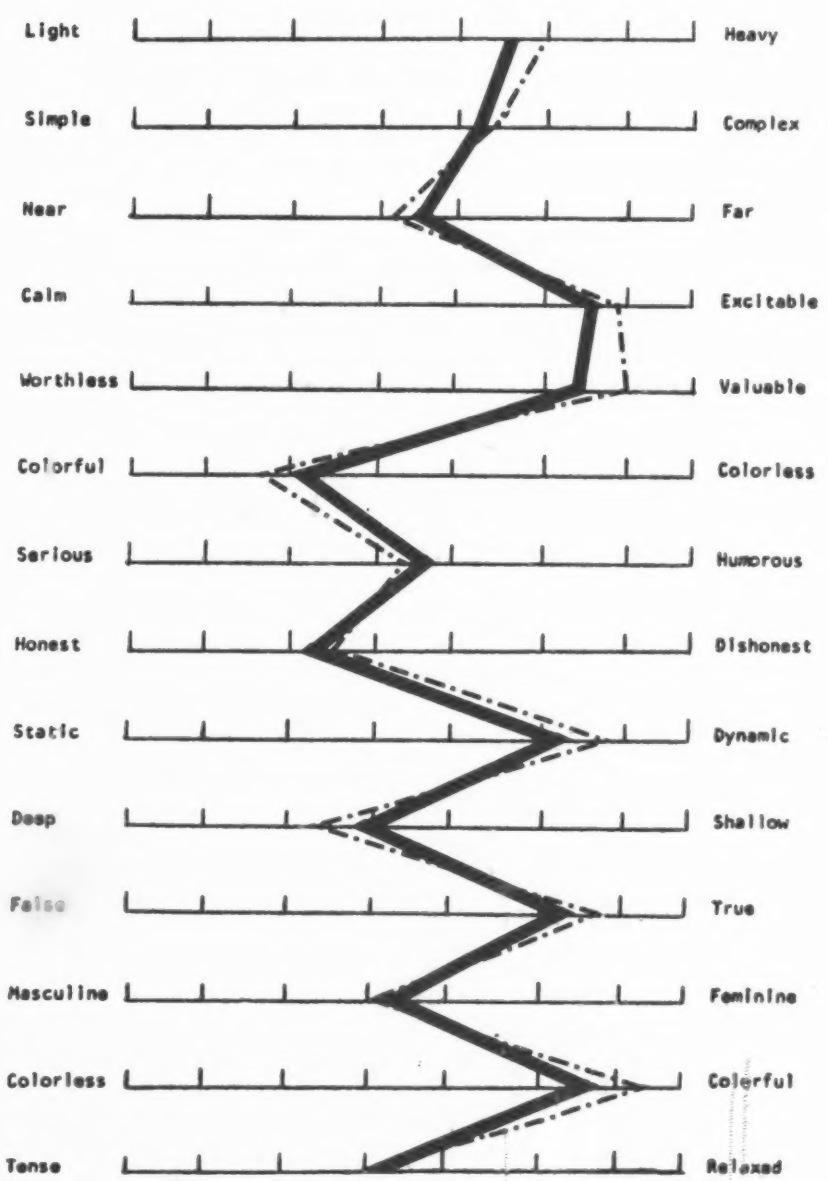
Insert Figure 2 Here

The largest, but still infinitesimal, differences in ratings were found to be those between the sexes, both within schools and across the whole sample of students. Figure 3 gives a graph of the differences between all males and all females in the sample. The two sets of ratings correlate .97.

Insert Figure 3 Here

The conclusions that may be drawn from this study are the following. First, student ratings of concepts related to an interracial production of West Side Story do not vary as a function of between-school differences, nor as a function of sex, nor as a function of prior experience with interracial theatre. Therefore, there is nothing in the data to suggest that different groups of students responded differently to this production by the Inner City Repertory Company, nor that the integrated theatre experience, by itself, was responsible for the agreement among students as to the "meaning" of the production. Second, the near-identity of ratings on all six of the concepts suggests that the concepts

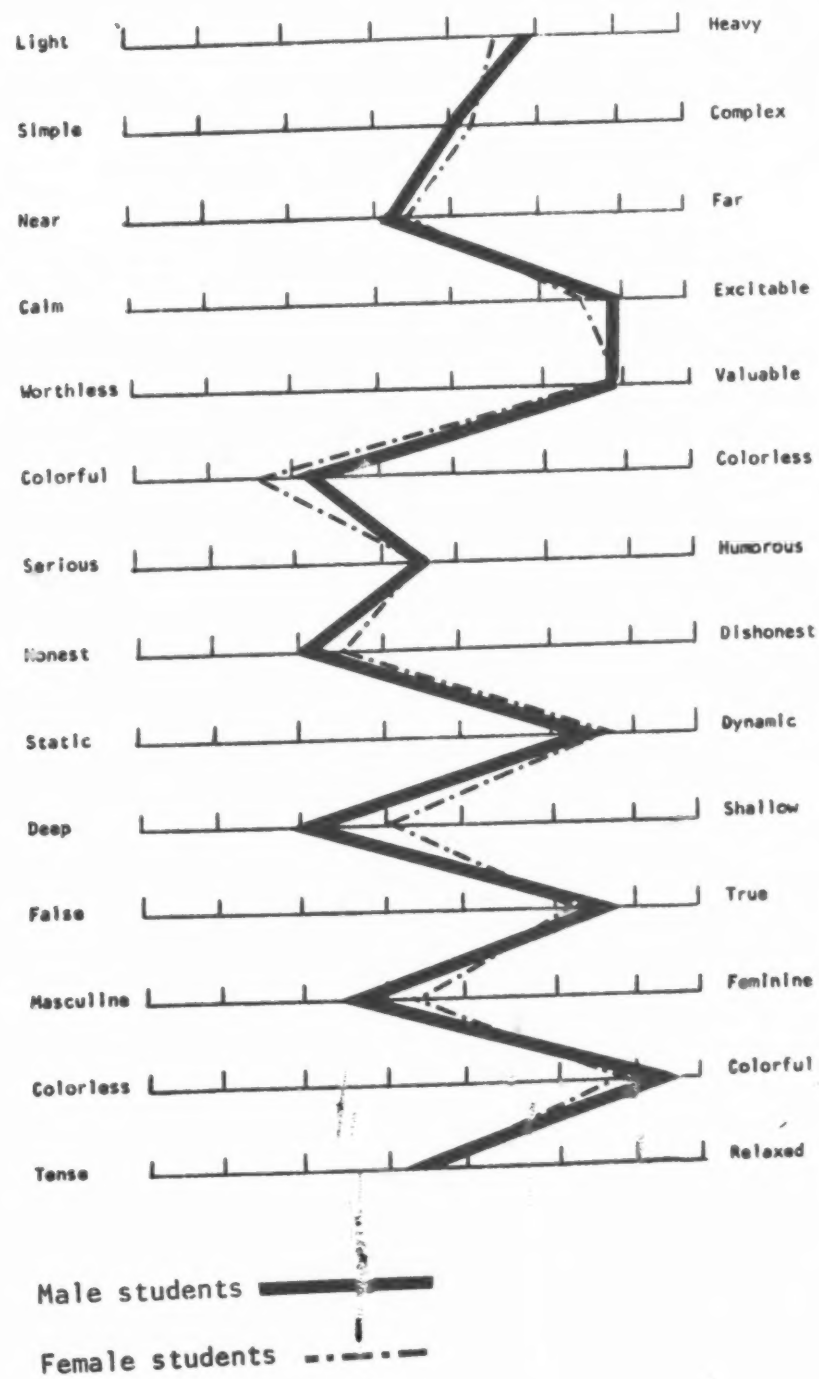
FIGURE 2. Profiles of Semantic Differential Ratings of "This Production of West Side Story" for Students Seeing No Plays and for Students Seeing More than Four Plays



Had seen no plays previously

Had seen more than four plays previously

FIGURE 3. Profiles of Semantic Differential Ratings of "This Production of West Side Story" for Male and Female Students



were, to the student respondents, equivalent in meaning; or, to put it another way, that the students did not discriminate between the whole experience and its elements. One of the desires of the sponsors of the Project was that students should move from global reactions to finer critical discriminations, so the absence of any evidence of such discriminations being made by any of the groups of students will (unless it is assumed that all of the elements are indeed somehow equivalent in meaning) be taken as a disappointing finding.

A brief postscript may be in order here. The results of this study are so odd that one's first reaction is to question the adequacy of the measuring instruments. If the particular version of the semantic differential that we used did not have a respectable history, we would probably have simply discarded the study as a false start--just as we indeed did discard studies using an "Attitude toward Theatre" instrument which we had developed.

A convincing interpretation of the results of this study is made even more difficult by the fact that consistent differences in response to the ICCC plays, as a function of race and sex, were found in the other studies in the series. So we found ourselves in a spot where although our results did not make good sense, we were not able to throw out the study because we had external evidence that the instrument used could distinguish differences in "meaning" where they did exist.

The best we can suggest, interpreting this study in the context of those to be reported later, is that perception of the meaning of a play (as "meaning" is measured by a semantic differential) is independent of the other sorts of perceptions and responses studied at other times in this series of investigations.

FOOTNOTES

[1] This Attitude Toward Theatre (ATT) instrument, which will be discussed only in this footnote, was a 36 item questionnaire, somewhat resembling the "Objectives for Drama" instrument discussed elsewhere, which was developed by Drs. Handrick and Hansen according to the best psychometric procedures. After spending much time on its development, field testing, and revision, and after administering it on several occasions in all three sites, we threw it out because we became convinced it was not able to do what we wanted it to do--which was to describe changes over time in participant's attitudes toward theatre and to describe difference between groups in such attitudes. Using the ATT, we had found unbelievably high correlations between successive administrations of the instrument ($r > .95$) and consistently good discrimination between groups of respondents (by race and sex, by profession). But factor analyses of intercorrelations between items produced factors which were conceptual nonsense. Furthermore, the factors obtained from responses on one administration of the instrument had little resemblance to factors obtained from responses to any other administration of it. And the factors were highly unstable as well, so that the factor structure could be completely altered by removing at random as few as half a dozen responses out of several hundred. We finally had to reach the conclusion that the ATT was inadequate to the making of useful descriptions or that we were not bright enough to understand just what it was measuring.

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THREE STUDIES OF THE PREFERENCES OF STUDENTS OF DIFFERENT RACES FOR ACTORS IN INTERRACIAL THEATRE PRODUCTIONS

James Hoetker and Gary Siegel

Background

Inherent in the idea that the interracial casting of the Inner City Repertory Company plays somehow made a difference to (and in) the audience, were the notions that an interracially casted play would be perceived and responded to differently than a conventionally casted play; and that, furthermore, the interracial nature of the cast was a value-added matter, giving the audience something in addition to what they would get from a comparable conventional production of the same play.

A few educators predicted that "subjecting" white students to interracial theatre would inflame racial prejudices and turn the students away from theatre itself. But in general, the educators maintained that, besides familiarizing the students with theatre, the experience would benefit students by teaching them to accept integrated situations as normal, giving them knowledge of the talents possessed by members of other ethnic groups, and leading them to believe in the possibility of harmonious interracial cooperation. To put it another way, white educators expected the theatre experiences to reduce the perceived dissimilarity between the races.

The theatre people and some minority educators, on the other hand, although not necessarily denying that middle-class whites might be so affected by interracial theatre experiences, were much more concerned with the theatre's affects upon minority students. The example of minority actors making it successfully in an integrated situation, they hoped, would, through a process of identification, increase the minority student's racial pride, improve his self-concept, and better his estimation of his own chances to rise in the world.

In the studies reported here we set out to examine the preferences of students for actors of different ethnic groups, to see if those preferences differed as a function of the students' race, sex, socioeconomic status, or amount of exposure to interracial theatre.

Findings of Previous Studies

Research on interpersonal attraction has consistently shown people to prefer others whom they perceive as similar to themselves--whether this similarity is in their religion (Festinger, 1950), socio-economic status (Broxton, 1962), values and attitudes (Newcomb, 1953, 1956), or beliefs (Rokeach, 1960). Similarly, research on interracial behavior has generally found that people prefer others of the same race (Allport, 1954; Mann, 1958). At one time this was usually found to be more true of whites than of blacks. Allport (1954) and Koch (1946), among others, found consistent patterns indicating that whites preferred whites more than blacks preferred blacks. However, there is increasing evidence that the old "identification with the agressor" phase has passed and been replaced by an increasing sense of black identity and black pride, especially among the young (Kirkhart, 1963; Derbyshire and Brody, 1964; Maliver, 1965).

At the same time, there appears to have been a gradual broadening of racial attitudes among whites as indicated in the series of studies carried out by Bogardus on social distance (1925, 1946, 1958). However, studies of lower socio-economic whites still show resistance to any real changes (Killian and Haer, 1958; Pettigrew, 1959). There is also evidence that what appears to be a growing white acceptance of blacks may only be a camouflaged paternalism (Katz and Cohen, 1962).

Experimental efforts to reduce social distance and increase interracial acceptance have generally focused on white attitudes toward blacks. The assumption that social distance between the races is primarily a white problem underlies many studies of racial attitudes that were made before "black pride" made its presence clearly felt. This new social reality has yet to be taken adequately into account. McDowell (1967), for instance, when she set out to review the literature on black attitudes toward whites, found that there were very few studies to review.

Experimental attempts to reduce racial antagonisms have commonly exposed the subjects to some form of interracial stimulus, either directly in interracial social situations or indirectly through the use of films or books or other media. Intimate personal interaction under favorable circumstances has been found to significantly reduce social distance between whites and blacks (Yarrow, Campbell, and Yarrow, 1958; Mann, 1959). But experiments involving exposure to media have been carried on predominantly among whites. Litcher and Johnson (1969), for example, found the use of multi-ethnic readers increased the awareness and acceptance of blacks by white elementary school children. Black reactions to multi-ethnic stimuli have been more talked about than empirically investigated.

Subjects

Students in twelfth grade English classes from four Los Angeles high schools were the subjects in the studies reported in this

paper. The schools are representative in important ways of the range of public schools in the Los Angeles district, having been randomly selected from lists of schools having certain racial and socioeconomic characteristics. For the purposes of reporting these studies, each of the schools is given a ficticious name. The first school, which we will call "Los Altos," serves the children of very well-to-do suburban whites. The second, which we will call "Central," has a large enrollment of Oriental and Spanish-American students, most of them from homes at a middling socioeconomic level. The third school, which we call "Lewis" (as in John L.) has a virtually all-white student body from homes in which the father is likely to be a skilled laborer and union member or a white collar worker in a non-executive position. The fourth school, which we will call "Langston Hughes," has an entirely black student body, and many of the students' parents are unskilled laborers or receive public assistance.

Los Altos and Hughes High Schools figure in all three of the studies; Central and Lewis are not represented in all of the studies. Table 1 summarizes the salient characteristics of the student bodies in the four high schools.

Insert Table 1 Here

The schools in the sample, it will be seen, differ along dimensions of socioeconomic status, racial makeup (using race in the popular, not the genetic sense, as synonymous with ethnic or cultural group), and familiarity with interracial social situations. Contrasts can be made between white schools at two SES levels, between white and black schools, and between schools which are racially segregated and racially integrated. The contrasts of greatest interest in the following studies are those between the races, though it is clear from Table 1 that racial differences are confounded with socioeconomic, verbal intelligence, reading ability, and parental status differences. But this is an unavoidable reflection of the structure of the society in which the schools exist. White schools at the lowest levels of SES, ability, and status simply do not exist, and all-black schools at any but the lower levels of these factors would be unrepresentative of black segregated schools in Los Angeles. When, in discussing the results of these studies, reference is made to differences as a function of the race of the respondents, it should be understood that what is being referred to is race plus the complex of other factors highly correlated with race.

The Strategy of "Replication with Variations"

Each of the three studies reported here called upon the subjects to choose for new roles actors that the subjects had just seen per-

TABLE 1. Summary of School Population Characteristics

Name of School	Enrollment by Ethnic Group*			Socioeconomic* Status	Mean Verbal IQ*	Mean Reading Score (%)*	Modal Occupational Status of Parents**
	% Black	% White	% Other Minority				
LOS ALTOS	0.1	99	0.9	upper-middle	110	73	professional
CENTRAL	12	50	38	middle	100	48	white collar and skilled labor
HUGHES	100	0	0	low	89	18	unskilled labor and unemployed
LEWIS	0.5	98	1.5	middle	107	55	white collar and skilled labor

* Data from published school board estimates and published standardized test scores

** As estimated by school principals

forming in a play. We had good reasons for thinking that two sorts of events would interfere with our data-gathering plans to such an extent that large extraneous errors might be introduced. In particular, we anticipated that, between performances, there would be changes within the casts of the plays, and that there would be wide variations, between schools and between ability levels, in the proportions of students who had attended the plays. In addition, we were using data-gathering procedures of unknown reliability and validity.[1]

Therefore, we adopted the strategy of thrice replicating the study, across two plays using different samples of students from the same schools, and each time varying the details of the task which the subjects were asked to execute. Our reasoning was that spelled out by Webb and his colleagues in Unobtrusive Measures:

> Once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced. The most persuasive evidence comes through a triangulation of measurement processes. If a proposition can survive the onslaught of a series of imperfect measures, with all their irrelevant error, confidence should be placed in it. (Webb, Campbell, Schwartz, and Sechrest, 1966; p. 3).

Within each of the studies, of course, we made every effort (as explained in the reports of the individual studies) to minimize error. The three studies, then, should be considered as the three parts of a single investigation, with attention being given primarily to those significant effects which are consistent across the three studies.

Instruments

Following in the tradition of studies of intergroup relations which have dealt with preferences for dolls, photographs, described persons, and so on, we asked students to choose for particular new dramatic or social roles actors and actresses from the cast of a play that the subjects had just seen performed. The instruments used in each of the studies consisted of an annotated cast of characters for the play the students had just seen and a set of descriptions of a smaller number of new roles, for which the subjects were to choose players from among those whom they had just seen perform. The roles to be filled were different for each of the studies, and a detailed description of each variation of the basic instrument forms part of the report of each study.

Method

For each study, three classes were chosen at random in each of the schools involved in the study, one class in each school at

each of three ability levels--high, average, and low. On the day after the last of the selected classes in a school attended the play, the instrument was administered in the three classes in the school.[2] The sampling by ability levels was to assure that the range of students in a school was represented, and the mean responses of the three classes in each school were averaged to give a school mean score for each dependent variable. Departures from these procedures will be noted where appropriate.

As will be seen, circumstances forced us to make slight changes from study to study in the ways that we scored and analyzed the data, and the procedures used in each study will be explained in the course of reporting the results of the studies. In general, however, the plan was to categorize the choices according to the ethnic identity of the chosen actors and actresses and to do a univariate analysis of variance of the choice scores, schools by sex by amount of experience with interracial theatre.

NOTES

[1] There were other problems, too, having to do with the nature of the task itself which recommended the multiple measurement approach. In the first two studies, subjects sampled without replacement five actors from a pool of 15. This meant that the probabilities of choosing an actor of a particular ethnic group for a particular part depended on the choices made for the preceding roles. To further complicate matters, not all the players were, in objective terms, equally eligible for all roles--the plot outlines of the new plays specified the sex and approximate age of the characters and gave hints of physical and personal attributes. Furthermore, there was no way of establishing whether all subjects would perceive the same actors as suitable for particular roles. For example, one student, casting a particular role, might perceive that his choice had to be made from among the three mature white actors available, while another student, casting the same role, might perceive his task as that of choosing the best available black actor for the role.

In this situation, the best we could do, to justify a probabalistic analysis of the data, was to make the arbitrary assumptions that (1) the suitability of any actor for any part was constant across subjects and (2) that choices of actors for roles were made in a random order. Under these assumptions, the probabilities governing the choices would be randomly distributed. The same assumptions were also made, more easily, for the third study, which called for choices for unrelated roles, i.e., sampling with replacement.

[2] Miss Phyllis Hubbell and Miss Melba Englander administer the various instruments. Miss Hubbell, in addition, assisted in designing the instruments.

First Study: First Version of the

Play-Casting Study

The task given subjects in this study was that of casting a new play from among the actors and actresses in the much larger cast of West Side Story, the play which the students had just witnessed. The first portion of the instrument that was prepared consisted of a cast of characters from West Side Story, with each character being fully enough described to assure that he or she could be clearly identified by the students with a particular actor or actress. The name of the actor or actress playing each part was given with the cast of characters, but there were in the descriptions no references to races or ethnic groups. The second part of the instrument is reproduced in Figure 1. The plot that is given is a loose adaptation of Galsworthy's Strife.

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Figure 1. Instructions to Students

and Plot Summary of New Play

INSTRUCTIONS: On the first page following this one is the outline of the plot of a well-known play. On the second following page is a list of the important characters in West Side Story. Look at the cast of characters to refresh your memory. Then read the plot summary. Imagine you are in charge of putting on this play for the students in your school, and the only actors and actresses available to you are those you have just seen in West Side Story. Which actors and actresses would you cast in each of the parts in the new play? Indicate your choices by writing, beside the characters' names at the bottom on the second page, the name of the actor or actress you would put in each part in the new play. You may use either the actor's real names or the name of the character he or she played in West Side Story. If you use the actor's real name, please write it out in full.

* * * * * * * * * * *

PLOT SUMMARY: The setting of the play is a large factory and the area around it in which the workers live. The factory has been closed for many months by a violent strike. JOHN ANTHONY is the president of the company which owns the factory, and he refuses to make any compromises with the workers. The workers are led by DAVID ROBERTS, who is equally stubborn in his refusal to compromise. MRS. ROBERTS is an invalid. The starving families of the workers complain to MRS. ROBERTS that their husbands would go back to work if it were not for ROBERTS' pride. Later, when MRS. ROBERTS pleads with her husband to have pity for the women and children, ROBERTS shouts, "No surrender!"

ROBERTS comes late to a union meeting and finds the men ready to agree to a compromise agreement with the factory owners. ROBERTS calls them cowards and traitors, but is interrupted in the middle of his speech by the news that his wife, weakened by hunger, has died. Meanwhile, the directors of the company meet and decide that they cannot stand the strike any longer and that they must

compromise. ANTHONY refuses to go along with a settlement. When he is told that women and children are starving and that MRS ROBERTS has died, he says, "War is war." The directors vote to compromise despite ANTHONY and he resigns. A delegation of workers is called in to settle the strike. ROBERTS tries to reject the compromise offer, but finds that the men will not follow him any longer. ROBERTS and ANTHONY, both now broken and disagreed, find themselves together outside the room where the strike settlement is being made. Both maintain their fanatical stubborness, but at the same time respect only one another. As they leave, separately, HARNESS, the new leader of the workers, and a SECRETARY are left on the stage. After all this suffering, HARNESS says sadly, we are agreeing on exactly the terms that were proposed before the strike began. What has it all been for? asks the SECRETARY. HARNESS thinks a moment and says, "Fun?"

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On the day after each of the representative schools had attended West Side Story, a staff member visited the school and administered the instrument in three randomly selected English classes; one class was at each of three ability levels, when this was possible. (At Los Altos, so few students from the available high ability classes had attended the play that the instrument was administered to an acting class.) Students who had not attended West Side Story were asked to explain to us why they had chosen not to attend, but did not complete the play-casting task.

A complicating factor in this study was that not all classes saw precisely the same cast in the production. All of the schools were, as it happened, scheduled to attend the play late in its run; and, as is not uncommon in a repertory company, a few actors in prominent roles were pulled out of the cast to begin rehearsals for the next play, and roles within the play were reassigned among members of the cast. The most significant cast change occurred between the time that half of the students at Central saw the play and the time that the rest of them saw it. It introduced the possibility of our obtaining spurious differences produced by the fact that a popular actor of a particular race was not available to be recast by the second group of students. We decided this particular cast change was too important to be ignored, so the data from the two classes at Central which had attended on the second day were discarded. In the casts seen by the other classes there were no differences in the male roles. Major changes in female roles, however, led us to drop from the analysis of variance the two roles in the new play for which females were eligible.

One further problem, specific to this study, confronted us as we set out to analyze the data. School policies in regard to student attendance at the Project plays differed considerably. Central differed from the other three schools involved in the study in making attendance next to compulsory. When we divided according to the amount of previous experience they had had with the Project (0-4 plays equalled "low experience," five or more plays equalled "high experience"), we found that there were no boys or girls from Central in the "low experience" category. This would have given us

two empty cells in the planned analysis, so we decided not to deal with the experience factor in this particular study.

The total number of actors listed on the cast of characters was nine, equally divided between white, black, and "other minority" categories. The numbers of students from whom usable responses were obtained were as follows:

	Male	Female	Total	
Los Altos	12	26	38	
Central	13	15	28	
Hughes	26	23	49	N = 115.

The choices given by the students in each school to actors of each ethnic group were distributed as in Table 1.

TABLE 1. Distribution of Each

School's Choices for Parts in the New Play

Given to Actors of Each Ethnic Group

	Los Altos	Central	Hughes
Black	.39	.36	.43
White	.19	.13	.10
Other Minority	.41	.52	.47

Omitting the female roles, we carried out an analysis of variance, schools by sex by male roles. The scoring of student choices for the analysis of variance was on the basis of whether a choice was given to a white or non-white actor. A score of 1 was given to a choice of a black or "other minority" actor and a 0 was given to a choice of a white actor. A mean score for each role was computed for boys and girls in each class, and the school mean for each role was the mean of the means of the scores of the three classes in the school.

Table 2 summarizes the class mean scores, and Table 3 summarizes the analysis of variance for these scores.

Insert Tables 2 and 3 Here

Between-schools and between-roles F-values were highly significant; between-sex differences and interactions were non-significant.

TABLE 2. Summary Table of Class

Mean Scores (Play-Casting Study, I)

School:	Los Altos		Central		Hughes		
Sex:	Male	Female	Male	Female	Male	Female	Total Role Means
Anthony	1.00 .75 1.00	.71 .50 .87	.71 1.00 1.00	1.00 1.00 .83	1.00 .80 .90	.89 .80 1.00	5.25
Roberts	1.00 .75 .83	.71 .75 1.00	.86 1.00 1.00	1.00 1.00 1.00	1.00 .90 1.00	1.00 1.00 1.00	5.60
Harness	.50 .00 .67	.86 1.00 .67	.71 .67 1.00	1.00 .86 .67	.83 .70 .90	1.00 .60 .78	4.47
Total School Means	2.17	2.35	2.64	2.79	2.67	2.70	15.32

TABLE 3. Summary of

Analysis of Variance (Play-Casting Study, I)

Source of Variation	Sum of Squares	df	Mean Square	F	P<
A (Schools)	0.256	2	0.128	5.57	.01
B (Roles)	0.334	2	0.167	7.26	.01
C (Sex)	0.018	1	0.018	-	NS
AB (Schools by roles)	0.022	4	0.006	-	NS
AC (Schools by sex)	0.009	2	0.001	-	NS
BC (Roles by sex)	0.117	2	0.059	2.57	NS
ABC	0.250	4	0.063	2.74	NS
Within Group	0.841	36	0.023		
Total	1.85	53			

FIGURE 1. Percentages of Non-White Choices by Each School for the Three Major Roles (Play-Casting Study, I)

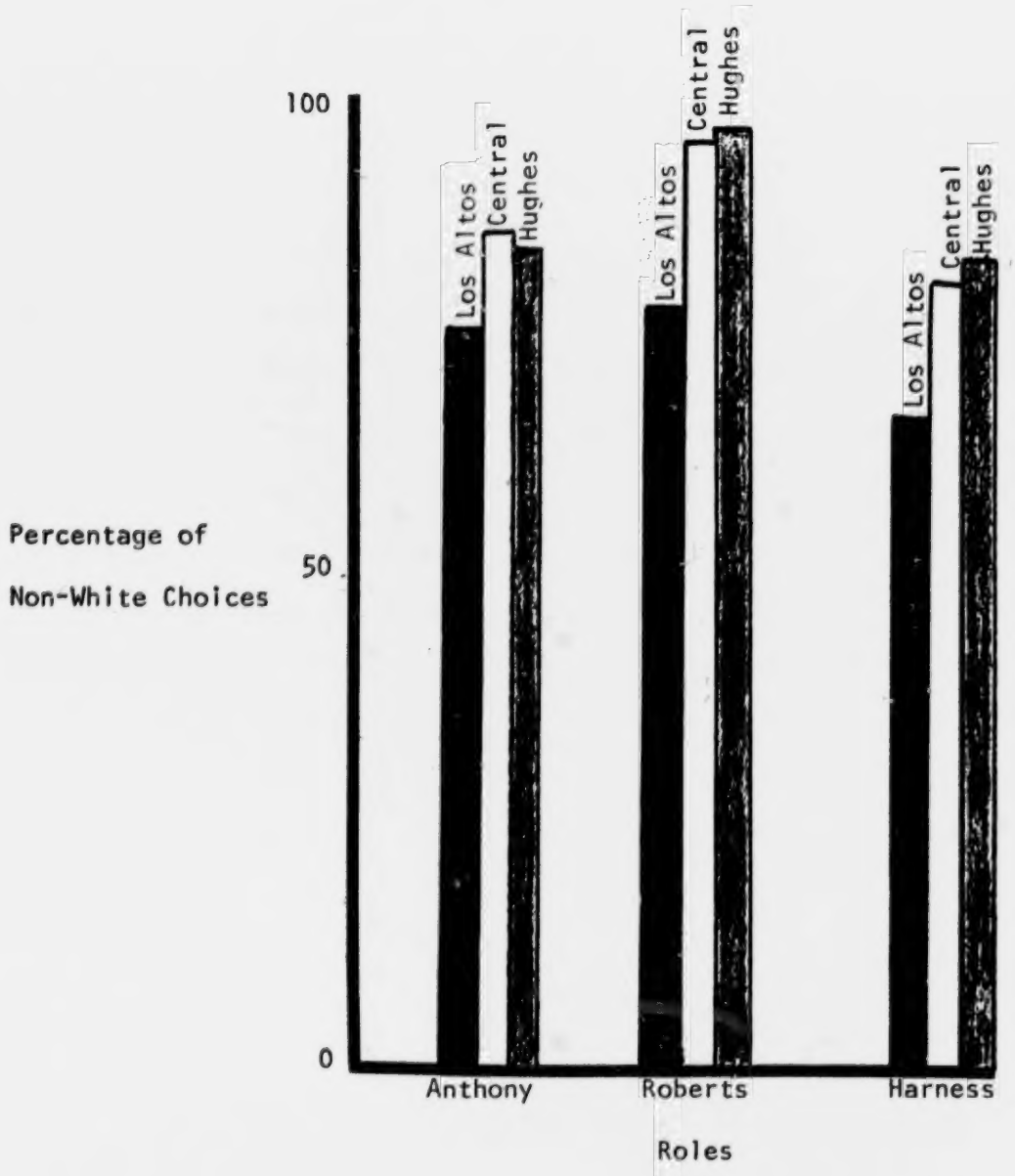

Figure 1 graphically illustrates the significant effects. Students

---

Insert Figure 1 Here

---

at Los Altos, although choosing proportionately fewer white actors than would have been expected on a probabilistic basis (33% of the male roles were played by whites), chose significantly more whites than the students at Central and Hughes. The students at Central, whose life at school was as well integrated as the theatre itself, made choices not significantly different from those made by the students at Hughes. Students from all three schools agreed in choosing more whites for the role of Harness than of Anthony, and of choosing more whites for the role of Anthony than for the role of Roberts.

In regard to the questions of whether the students had accepted the Inner City Repertory Company's convention of casting without regard to race and of whether the schools differed in the extent to which they accepted it, we examined the ways in which the respondents cast two pairs of characters, (1) Anthony (the capitalist) and Roberts (the labor leader) and (2) Roberts and his wife. If the casting were naturalistic, the part of the capitalist would almost certainly be given to a white. But, in fact, although there were mature white actors available from the cast of West Side Story, very few whites were chosen for the part by any group. Further, the groups' choices centered on two actors--one black and one Spanish-American--so that, when the choices were grouped by ethnicity, there were no significant differences between schools. (The X^2 value for the data in Table 4 is 4.86, $P < .30$.)

TABLE 4. Number of Choices in Each

Ethnic Group Made by Students in Each School

for the Role of John Anthony

	Los Altos	Central	Hughes
Black	22	13	23
White	7	4	5
Other Minority	10	12	25

The case is the same with choices for the part of the labor leader. For the data in Table 5, $X^2 = 7.34$, which is significant between the .10 and .15 levels.

TABLE 5. Number of Choices in Each

Ethnic Group Made by Students in Each School

for the Role of David Roberts

	Los Altos	Central	Hughes
Black	6	6	18
White	5	1	2
Other Minority	28	22	33

When the two roles of the capitalist and the labor leader were considered together, however, significant differences were found in the ways that the roles were cast. The white students from Los Altos much more frequently cast the roles interracially than students from the other two schools. Eighty-seven per cent of the choices for the two roles made by Los Altos students involved actors from two different ethnic groups, while only 55 per cent of the choices from Central and Hughes involved actors of two ethnic groups. However, for all groups, black-white pairs were very rarely chosen and choices of two black actors were equally rare. Integrated pairs usually involved a black and a Spanish-American actor, while the single-group choices usually involved two "other minority" actors. Table 6 shows the choice made for the two parts by students in the different schools.

TABLE 6. Number of Choices of

Single-Group and Integrated Pairs Made by Students

in Each School for the Roles of Anthony and Roberts

	Los Altos	Central	Hughes
Single Group	5	13	24
Integrated (black-white)	4	2	3
Integrated (black-minority)	22	13	24
Integrated (white-minority)	8	1	2

The X^2 value for these data is 17.55, which is significant beyond the .01 level. The Los Altos students chose single-group pairs much less frequently than students at the other two schools, and they more frequently chose a white actor as a member of an integrated pair than did the others. This might suggest that the white middle-class respondents have accepted the conventions of interracial casting more fully than have the other types of students. Or, since the two roles in question are the major ones, it may mean that the students from Central and Hughes tended to give the most important parts to minority actors while casting whites in minor roles (what one might call a "promotion effect").

In regard to the casting of the husband-wife parts, however, there were not similar differences between schools. Certainly, if the between-school differences in the casting of the capitalist-labor leader pair were due to resistance to the interracial casting concept, one would expect the effects to be even stronger when it came to the casting of man and wife roles. But about two-thirds of the respondents in each school chose an actor and actress of different ethnic groups to play the parts of Roberts and his wife.

TABLE 7. Number of Choices of

Single-Group and Integrated Couples

Made by Students in Each School for the Roles of

Mr. and Mrs. Roberts

	Los Altos	Central	Hughes
Single Group	12	10	18
Integrated	27	19	34

One important difference between the two pairs of characters, is that the wife's role, in the plot of the play, is a secondary one, so the tendency to give more important parts to actors of one's own race, posited to explain the between-schools differences in the casting of Anthony and Roberts, would not have been so strongly at work. The notion that the ethnicity of the respondents might affect, not the choice of actors, but the importance of the role assigned them, rose from examination of the data. And, as is usually the case with post facto hunches, the data did not allow us to estimate what we may call the "promotion effect." We were, however, able to manipulate the data in such a way as to give us a better idea of whether such an effect might be at work.

We reasoned that a student's choice of an actor for a role might be influenced by such things, beyond race and ethnicity, as the student's objective estimate of the player's rightness for a particular part (age, bearing, talent, and so on), and by such factors as a particular player's familiarity from previous productions or television roles, his popularity with students, and the importance of the role he played in the play the students had just seen. As it happened, the factors of talent, familiarity, popularity, and importance of role were highly confounded, with the leading parts in West Side Story being played, for the most part, by skilled actors and actresses who had played roles of similar prominence in earlier Inner City productions.

This meant that we could weight the roles in West Side Story according to such criteria as number of lines and songs and total time on stage and have some confidence that the weights would also be related to

the other factors which might influence student choices. A weight of three was given to the leading roles--Tony, Maria, Riff, and Anita. A weight of two was given to the secondary roles--Bernardo, Officer Krupke, Anybody's, Rosalia, and so on. And a weight of one was given to the smaller speaking roles--Chino, Velma, and so on. In the new play, weights of three were given to Anthony and Roberts, two to Mrs. Roberts and Harness, and one to the secretary.

A measure of prominence for each ethnic group was computed by summing the weights of the parts played by members of each group in West Side Story. The measure of prominence for each group was then divided by the sum of the weights of the entire cast. This gave us a projection of what proportion of the "prominence" in the new play would be allocated to each ethnic group if choices were determined solely by prominence in West Side Story and by factors confounded with prominence.

The observed proportions of prominence were obtained by counting the number of members of each group assigned to each part in the new play, multiplying by the weight of the role, summing for each group across the five roles, and then dividing by the sum of weights times the total number of choices. These procedures were not completely satisfactory for two reasons. First, there was little room for the promotion effect to operate--the choice of an actor in a weight 3 role in West Side Story for a weight 3 role in the new play could not tell us anything. Second, if prominence was indeed an important factor in determining choices, the chances would be that the major players in West Side Story would all be cast in the new play. Since there were only two weight 3 roles in the new play, all but two of these actors would have to be, in effect, demoted if they were recast in the new play, even though the choosing itself may have been meant by the respondent as a mark of favor.

At any rate, the comparisons between the projected and the observed prominence scores (Table 8) makes a bit clearer the effects

TABLE 8. Comparisons of Projected and Observed Prominence Scores by Ethnic Groups for Students from the Three Schools

	Los Altos		Central		Hughes	
	Proj.	Obs.	Proj.	Obs.	Proj.	Obs.
Black	.33	.36	.40	.34	.33	.38
White	.27	.26	.27	.17	.33	.19
Other Minority	.40	.38	.33	.49	.33	.42

noted earlier. The projected and observed prominence scores of the different ethnic groups are about the same in the casts chosen by the Los Altos students. In the casts chosen by the students at Central, the school with the largest "other minority" enrollment, both blacks and whites are given a smaller than expected share of prominence, while "other minority" actors are given a larger share. At Hughes, the all-black school, whites are given less than expected prominence, blacks somewhat more than expected, but "other minority" actors are given more prominence than blacks.

The relationships between the racial composition of the audience and the interracial nature of the theatre company are not, it seems clear, gross or simple ones. To summarize: students from all three schools overchose non-white actors, but both Central and Hughes students chose significantly fewer whites than Los Altos students. There were no significant differences between boys and girls in the choices made.

There were no significant differences between schools in the choices given to the different ethnic groups for the roles of Anthony, the capitalist, or Roberts, the labor leader, but, when the roles were considered together, Los Altos students were significantly more likely to integrate the pair of roles. In regard to the husband-wife roles, about two-thirds of the students from each school integrated the pair of roles. Finally, the tendency for Central and Hughes students to overchoose black and minority actors was accompanied by a tendency to choose black and minority actors for the more important roles in the new play, while choosing whites mainly for less prominent roles.

Second Study: Second Version of the Play-Casting Study

The methodology of this study was essentially the same as in the one just reported, but the white working class school we call Lewis replaced Central. The dramatic plot used in this second version of the study was constructed especially to enable us to look at particular between-school differences, and more detailed attention is given to the plot below than was given to it in reporting on the first version of the study.

As in the earlier version, students in one twelfth-grade English class at each of three ability levels in the representative schools were given the recasting task. Each student was asked to identify his or her school, English teacher, and sex, and to check the titles of the Project plays he or she had attended. Each student was given an annotated list of the 14 characters in the play, and the instructions given each student were identical to those in the earlier study, except that the title of the second play of the season, Room Service, replaced the title of the first play.

The first paragraph of the plot outline of the new play set the scene and introduced one of the major characters:

> This play takes place in a small midwestern city. Mr. Richwell is the owner and manager of Richwell Corn Products, a company originally founded by his grandfather. He and his family are very active in local society. Mr. Richwell belongs to the Chamber of Commerce, the country club and is on the board of directors of several charitable organizations.

Mr. Richwell, as he is sketched in this paragraph would, almost certainly, in any naturalistic casting, have to be a white man. We wished to see if there were differences among the groups of students in the extent to which they might cast in Mr. Richwell's role a black or minority actor--one who might, for example, strike them as handling himself more like a Richwell than any available white actor.

The two following paragraphs introduced the character of Mr. Richwell's son and set up the conflict:

> Mr. Richwell has had very little contact with his son, George, over the last four years. George has been attending a university in the east while Mr. Richwell still pictures George as the quiet, intellectual boy he was in high school.
>
> George, however, has changed dramatically. He completely rejects his father's way of life. He has decided that he does not want to work in the family business and further that he intends to marry Debbie Soames, a girl whose background is radically different from his.

We wished to see whether the groups of students would differ in the extent to which they chose actors of different races for the role of George, and, more importantly, whether they differed in the extent to which they would cast the father and son roles interracially. The paragraphs, further, deliberately do not explain how Debbie Soames' background is "radically different" from George's. The conflict-causing discrepancy could be socioeconomic, religious, ethnic, or racial. We wished to see whether there were differences between groups of students in the extent to which the "radical difference" was set up as a racial one--i.e., with both Mr. Richwell and his son being of one race and Debbie's father being of another. (Debbie herself does not appear in the new play because there were only two actresses in Room Service available to be cast in her part.) The next three paragraphs elaborate the conflict and introduce two new characters:

> Despite his new independence, George doesn't know how to break the news to his father. He asks for advice from Robert Grant, a minister he has met at school. Instead of advice he gets a lecture. Grant is opposed to the marriage. He says that the differences are too great and George will come to resent his wife for keeping him from the kind of life he had as a child. The minister also points to his responsibility to honor his parents.
>
> George is angered by this speech and leaves to confront his father. George walks into his fathers office at the company and tells him of his plans. Mr. Richwell reacts violently to this unexpected news and throws his son out.
>
> As Mr. Richwell returns to his desk, his secretary announces that Mr. Soames, Debbie's father, is waiting to see him. Mr. Soames enters and it is soon apparent that he is equally disturbed about the proposed marriage. The two fathers agree to join forces to prevent the wedding.

The Reverend Grant, a role which might naturalistically be played by an actor of any race, probably would not be perceived by most adolescents as a sympathetic figure. We were interested in whether the groups of students would differ in the way they assigned actors of different ethnic groups to this role. The final paragraph relates the rest of the plot, concluding with the sort of cop-out mandatory in successful plays on themes of this sort.

> The fathers scheme and place many obstacles in the paths of their children. During this partnership, the two fathers gradually become very close. Finally, their plans are successful and the engagement is broken. The two men meet for the last time to celebrate their success and for the first time admit how deep their friendship is. They realize that their differences are not important and that they have been wrong about the marriage.

As the play ends, they are trying to dream up a plan to bring the two children back together.

The number of usable responses obtained was as follows (some students failed to indicate their sex):

Number of Respondents

	Male	Female	Total	
Los Altos	8	17	26	
Hughes	12	22	37	
Lewis	17	16	37	N = 100

The choices given by the students in each school to actors of each ethnic group were distributed as in Table 1.

TABLE 1. Distribution of Each School's Choices for Parts in the New Play Given to Actors of Each Ethnic Group

	Los Altos	Lewis	Hughes
Black	.31	.27	.57
White	.55	.55	.36
Other Minority	.14	.18	.07

During this version of the play-casting study, cast changes in the production which was serving as the stimulus event again occurred to complicate the study. The first two schools to attend the play--Los Altos and Lewis--saw the same cast, which consisted of four black, seven white, and three "other minority" actors and actresses. But there were five cast changes before the first half of the students from Hughes saw the play; one actor was replaced and four parts were reshuffled. And, by the next day, when the other half of the Hughes students saw the play, there had been two more cast changes. Still, the cast seen by this last group of students was not radically different in its racial composition from the casts seen by the other schools: five blacks, seven whites, and two "other minority" players.

This reshuffling of the cast during the performances for Hughes students was unfortunate, in that it destroyed the correlations between prominence of role and the factors or popularity, talent, familiarity, and so on which might have enabled us to weight the data. More seriously, it meant that the probabilities of choosing actors of particular races were not the same for all schools. Taking note of these differing probabilities, and still making

the assumption that casting decisions were made in a random order, we handled the data in the following way.

First of all, the classes involved in this study were racially homogeneous. So we redefined the choice made in each casting decision as being one which involved choosing an actor of one's own race or of another race. For each of the schools, we computed the percentage of actors in the Room Service cast who were of the same race as the students in the school. The expected frequency of choices of actors of any respondent's own race was given by multiplying the percentage of actors of the respondent's race by the number of choices to be made--four, in this case. In scoring the cast choices for the new play, one point was given when an actor named for a part was of the respondent's race, and the sum across the four roles was the student's score.

An adjusted mean score was then computed for those students in each of the nine classroom groups who were at each of the combinations of levels of the sex and experience factors. That is, within each classroom group at each school, a mean was computed for boys of high experience and low experience, and for girls of high and low experience. The adjusted mean scores were given by:

$$\frac{\text{the sum of student scores} - (\text{number of students} \times \text{the expected frequency})}{\text{number of students}}$$

The school mean score for the students in each classification was the mean of the classroom group means from that school.

The school means thus obtained are entered in the summary tables in Table 2. And Table 3 summarizes the analysis of variance for these scores.

Insert Table 2 Here

Insert Table 3 Here

Only the between-schools F-value reached the .05 level of significance. From the summary tables, it is clear that the students in the two all-white schools behaved similarly. The students in the all-black school differed from both by giving their choices to black actors almost half again as often as might have been expected on probabilistic grounds. So the best explanation of the significant effect is that

TABLE 2. Summary Tables of School Mean Scores
(Play-Casting Study, II)

(i) ABC Summary Table

Sex:	Male		Female		
Experience:	High	Low	High	Low	Total
Los Altos	-1.33	0.003	0.17	0.04	-1.12
Lewis	0.08	-0.36	-0.78	-0.08	-1.14
Hughes	1.34	1.17	0.67	1.42	4.60
	0.09	0.81	0.06	1.38	2.34

(ii) AB Summary Table

Experience:	High	Low	Total
Los Altos	-1.16	0.04	-1.12
Lewis	-0.70	-0.44	-1.14
Hughes	2.01	2.59	4.60
	0.15	2.19	

(iii) BC Summary Table

Experience:	High	Low	Total
Male	0.09	0.81	0.90
Female	0.06	1.34	1.44
	0.15	2.19	

(iv) AC Summary Table

Sex:	Male	Female	Total
Los Altos	-1.33	0.21	-1.12
Lewis	-0.28	-0.86	-1.14
Hughes	2.51	2.09	4.60
	0.90	1.44	

TABLE 3. Summary of Analysis of Variance of Own-Group Choice Scores (Play-Casting Study, II)

Source of variation	Sum of square	df	Mean Square	F	P<
A (Schools)	10.66	2	5.33	22.74	.01
B (Experience)	0.68	1	0.68	2.89	NS
C (Sex)	0.05	1	0.05	--	NS
AB (Schools by Experience)	0.23	2	0.11	--	NS
AC (Schools by sex)	1.35	2	0.68	2.89	.10
BC (Experience by Sex)	0.06	1	0.06	--	NS
ABC	1.30	2	0.65	2.76	.10
Within cells	3.52	15	0.23		
Total	18.58	26			

black students were much more likely to give their choices to actors of their own race than were white students at either socioeconomic level.

The AC interaction, schools by sex, is hard to interpret with any assurance. At both Hughes and Lewis, the girls were somewhat likelier than the boys to make choices outside their respective ethnic groups. But at Los Altos it was the boys who made the larger number of choices of actors of another ethnic group. The differences between the boys and girls at Los Altos are, in fact, quite large. A partial explanation of this situation may perhaps be found outside of the data. Since participation in the Project was voluntary, one might speculate that the samples of participating students contained proportionately more students favorable to interraciality than the student bodies of the schools. But the girls at Los Altos, as has been noted, tended to overchoose actors of their own race. The speculation and the fact may be reconciled by one further speculation: that middle class girls, are less likely than boys or working class girls to withdraw from a program that is (a) an official school function and (b) "cultural"--so that the sample of Los Altos girls may have been differently constituted than the sample of boys, i.e., more representative of the whole student body. Little may be said about the complex ABC interaction beyond what has already been said.

Turning to the casting of particular roles within the new play, there were notable differences between the schools in the casting of Mr. Richwell and of his son and differences between the schools in the degree to which they were willing to integrate the two parts by casting a father and son of different ethnic groups. Table 4 gives the percentages of choices within each ethnic group for the role of Mr. Richwell ($X^2 = 45.78$; $P < .001$).

TABLE 4. Percentages of Choices in Each Ethnic Group Made by Students in Each School for the Role of Mr. Richwell

	Los Altos	Lewis	Hughes
Black	0	8	62
White	96	76	38
Other Minority	4	16	0

The differences here between Hughes and the other schools are remarkably pronounced. One might interpret this as meaning the black students insisted on choosing a black actor to play the role of a midwestern WASP because his was the leading role, or one might suggest that few white students were acceptant enough of the convention of casting without regard to race to put other

than a white actor in an obviously "white" role. Table 5 gives the choices for the role of George Richwell ($X^2 = 16.87$; $P < .01$).

TABLE 5. Percentages of Choices

In Each Ethnic Group Made by Students in Each School

for the Role of George Richwell

	Los Altos	Lewis	Hughes
Black	73	51	92
White	23	46	5
Other Minority	4	3	3

What is notable here is the large number of black actors chosen for the son's part by students from the white schools, who had chosen a white actor for the father's role about 80% of the time. This, and the findings reported below, would seem to discredit the suggestion that the between-school differences are due to white students not accepting the convention of interracial casting.

Table 6 shows the percentages of choices for the father-son roles that (1) gave a father and son of the same race, (2) that integrated black and white actors in the two roles, and (3) that integrated the roles in other ways ($X^2 = 16.85$; $P < .01$).

TABLE 6. Percentage of Choices of

Single-Group and Integrated Pairs by Students

in Each School for the Roles of Mr. Richwell and His Son

	Los Altos	Lewis	Hughes
Single-Group	19	38	62
Integrated (black-white)	73	43	35
Integrated (other)	8	19	3

It is the students at Hughes who most clearly prefer actors of a single ethnic group--most often black--in the father and son parts Analyses of the choices for father-son pairs were found to be unrelated to amount of experience with the Theatre Project for the sample of respondents taken as a whole ($X^2 = 1.03$; 4 df), but within Hughes, the between-sex differences were significant (X ($X^2 - 6.70$; 2 df; $P < .02$), with girls being much more likely to integrate the father-son roles.

There was then, to summarize, a statistically significant tendency for the black students in this study to overchoose actors of their own race and to prefer single-race as opposed to integrated casting of the major pair of roles in the new play. There was no evidence of a comparably strong relationship between choices and race in the groups of white students.

This strongly suggests that different groups of students respond in different ways to the interracial dimension of the Inner City Company productions, even though it may be, as the semantic differential ratings suggest, the total production "means" much the same to all groups of students. Many white students seem to have accepted the convention of casting the actor who is "right for the part," regardless of race, while many black students seem often to choose on the basis of race, though from a "patriotic" rather than a naturalistic motivation. This behavior is quite in line with the predictions of those persons who thought that interracial experiences might affect student attitudes differentially, leading white students toward acceptance of other ethnic groups, while at the same time enhancing the racial pride and identity of black students.

There also seemed to be differences in the extent to which students in different groups perceived the underlying conflict in the plot of the new play as being a racial one. If a student cast the parts of Mr. Richwell and George Richwell from one ethnic group, and the part of Mr. Soames from another, we might infer the possibility that he has perceived the "radical difference" between George and Debbie as a racial one and the play as one about the difficulties of inter-group romance, along the line of Abie's Irish Rose or Guess Who's Coming to Dinner. (If, of course, a student conceived the play in this way, but so completely accepted the interracial casting convention that he nonetheless assigned the roles without regard to naturalistic consistency, there would be no way we could tell it from his responses.)

Among the Los Altos students, only five (of 26) respondents did not integrate the father-son pair, and in each of these cases both roles were filled by whites. In two cases, Mr. Soames was cast as black, and in three he too was white. At Lewis, 14 (out of 37) respondents chose both members of the pair from one racial group, and 13 of the pairs were white. Only one of the respondents who chose a white father and son chose a black Mr. Soames, seven chose a white Mr. Soames, and five chose an "other minority" person for the role. At Hughes, 23 (out of 37) respondents cast the father and son from the same ethnic group, and in 22 of the cases both were cast as black. Thirteen of the 22 who chose black Richwells cast Mr. Soames as white and eight cast him as black. Overall, despite the tendency of the Hughes students to overchoose blacks, they chose more whites for the Soames part than blacks.

Whatever detailed sense one might care to make of these differences, one thing seems clear, and that is that it was the students at Hughes who were most aware of, and most strongly influenced by, racial considerations, both in their choices of actors and in their assigning actors to parts in the new play.

One final comparison, in regard to the part of the minister, whom, as noted, we had tried to draw as a character unsympathetic to adolescents. Table 7 shows the percentage of choices for the Reverend Grant role that were made by students.

TABLE 7. Percentages of Choices Made by Students in Each School for the Role of Reverend Grant, Within and Outside of Own Ethnic Group in Each School

	Los Altos	Lewis	Hughes
In Own Group	38.5	35.1	37.8
In Other Group	61.5	64.9	62.2

Each of the groups, it is clear, was reluctant to cast a member of its own race in the role of a moralistic square. It may say something about contemporary racial stereotypes that the part of the minister was assigned to a white by more than half the students at Hughes. The middle-class white students at Los Altos, on the other hand, gave about three-quarters of their choices for the role to the two "other minority" actors in the cast; while the working class white students at Lewis chose black and "other minority" actors about equally for the minister's role. This suggests that ethnocentric considerations were not operating blindly, to determine that such and such a number of all choices should be given to actors of a particular race, but were operating more subtly and intelligently, to determine that actors of particular races would be assigned to particular sympathetic or unsympathetic roles.

Third Study: Choices of Actors for Social Roles

The two studies just reported examined the ways that students assigned dramatic roles to actors and actresses of different ethnic groups. This study examined the ways that students assigned actors to social roles of varying degrees of intimacy. The subjects in this study were the same students who participated in the second playcasting study; and the data for both that study and the present one were obtained during the same class periods.

Each student was given an annotated list of the characters in Room Service and instructed to "answer each of the questions...by writing in the name of one of the actors or actresses." The four questions were of a type familiar from sociometric studies, and they required a student to choose actors for different sorts of social roles, which ranged from the impersonal to the intimate. The students were instructed that they could choose the same actor or actress for any number of the roles. The four questions were as follows:

1. Which of these actors or actresses would you like to see appearing in a TV series?

2. Which of these actors or actresses would you like to have come speak to your class?

3. Which of these actors or actresses would you like to get to know as a friend?

4. Which of these actors or actresses would you have liked to have had an an aunt or uncle when you were young?

In choosing actors for social roles, the students were free to choose any actor or actress in the cast for any (or all) of the roles, and they were, therefore, not under the sorts of constraints imposed by the play-casting task. They did not, for example, have to consider the physical suitability of an actor for a role, nor did they have to restrict their choices for particular roles to young or old actors, nor did they have to choose a certain proportion of males to females, and so on.

With the students free to choose any actor or actress for any social role, more than 85% of all choices went to actors (with no differences between groups in choices given to actors and actresses), and 58% of all choices were given to black actors--though less than 40% of the available players were black. The choices given by the students in each school to actors of each ethnic group were distributed as in Table 1.

TABLE 1. Distribution of Each School's Choices for Social Roles Given to Actors of Each Ethnic Group

	Los Altos	Lewis	Hughes
Black	.49	.37	.81
White	.25	.28	.10
Other Minority	.18	.26	.06
No Choice	.07	.08	.03

The choices made by the same students for the second play-casting study and the present study were correlated .41, which is significant between the .05 and .10 levels. The major differences between the two sets of choices were accounted for by the students giving multiple choices to two young black actors, so that the two received almost four times as many choices in the social role study as in the play-casting study. At the same time, a middle-aged white actor, who had been most chosen for the father part in the play-casting study, received only a quarter as many choices in the social role study. The preference of the students, considered as a whole, was clearly for the black actors under 30 years of age, who together received more than 47% of all the choices given.

For the analysis of variance each choice was scored as being within the respondent's own racial group (+1) or outside of it (0). As in the previously reported study, a student's adjusted mean score over the four roles was the difference between the number of actors of his own race that he chose and the number that he would have been expected to choose on the basis of chance. Since the four social roles were independent of one another, as the roles making up the cast of a play in the previous studies had not been, analyses were made of choices for each role as well as for the four roles taken together.

The adjusted mean scores for the four roles taken together are summarized in Table 2, and the analysis of variance for those scores is summarized in Table 3. It will be seen that the between-schools

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Insert Table 2 and 3 Here

F value is highly significant, while none of the other effects approach significance. The summary tables make clear, that, as in the previous study, the two all-white schools behave very much alike, giving fewer

TABLE 2. Summary Tables of School Mean Scores

(Social Role Study)

(i) ABC Summary Table

Sex:	Male		Female		
Experience:	High	Low	High	Low	Total
Los Altos	-2.33	-1.11	-1.00	-1.72	-6.16
Lewis	-0.63	-1.61	-1.28	-0.66	-4.18
Hughes	2.00	2.02	1.97	2.09	8.08
	-0.96	-0.70	-0.31	-0.29	-2.26

(ii) AB Summary Table

Experience:	High	Low	Total
Los Altos	-3.33	-2.83	-6.16
Lewis	-1.91	-2.27	-4.18
Hughes	3.97	4.11	8.08
	-1.27	-0.99	

(iii) BC Summary Table

Experience:	High	Low	Total
Male	-0.96	-0.70	-1.66
Female	-0.31	-0.29	-0.60
	-1.27	-0.99	

(iv) AC Summary Table

Sex:	Male	Female	Total
Los Altos	-3.44	-2.72	-6.16
Lewis	-2.24	-1.94	-4.18
Hughes	4.02	4.06	8.08
	-1.66	-0.60	

TABLE 3. Summary of Analysis of Variance for In-Group Choice Scores (Social Role Study)

Source of Variation	Sum of Squares	df	Mean Square	F	P<
A (Schools)	54.65	2	29.83	68.12	.01
B (Experience)	0.01	1	0.01	0.03	NS
C (Sex)	0.18	1	0.18	0.42	NS
AB (Schools by Experience)	0.19	2	0.09	0.22	NS
AC (Schools by Sex)	0.12	2	0.06	0.14	NS
BC (Experience by Sex)	0.54	1	0.54	1.23	NS
ABC	1.32	2	0.66	1.51	NS
Within Cells	7.01	16	0.44		
Total	127.11	27			

choices to actors of their own race than might be expected, while the students from the all-black school choose black actors in excess of the expected numbers. Figure 1 graphically compares the three schools in regard to the percentages of choices given within and outside of the students' own ethnic groups.

Insert Figure 1 Here

The next question we wished to ask was whether students made different choices for roles of varying degrees of intimacy--would, for example, white students be more willing to choose actors of another ethnic group for the "TV actor" or "speaker" roles than for the "friend" or "relative" roles? Since sex and experience and interaction effects on mean scores were negligible, only between-schools differences in choices for each of the four roles were examined.

For the purposes of this analysis, the scoring was as follows: a score of +1 was given to a choice of an actor of the respondent's own ethnic group, a score of -1 was given to a choice of another ethnic group, and a 0 was given if no choice was made for the particular role. To get the classroom mean score for each role, the algebraic sum of the student scores was divided by the number of students who made choices. The mean score for each role was the mean of the mean scores of the three classes in the school.

The class mean scores for each of the roles are summarized in Table 4. (The 0 cell entries represent cases where there were equal numbers of own-group and other-group choices.) Table 5 summarizes the analysis of variance for these scores.

Insert Tables 4 and 5 Here

It is clear from these tables that the between-schools differences were consistent across the four roles, and that student choices were not a function of the intimacy of the roles. Figure 2 graphically summarizes these between-schools differences, which are clearly too large to be explained by the fact that the Hughes students had available to them, in the cast they saw doing Room Service, one more black actor than was available to the white students. The arrows on the ordinate in Figure 2 indicate the proportion of black and white actors in the casts seen by the black and white schools. What is as remarkable as the tendency for the black students to overchoose black actors, is the tendency for the white students to overchoose black and "other minority" actors--or, to put it the other way, to underchoose whites.

FIGURE 1. Percentages of Total Choices by Each School, Within and Outside of Own Ethnic Group (Social Role Study)

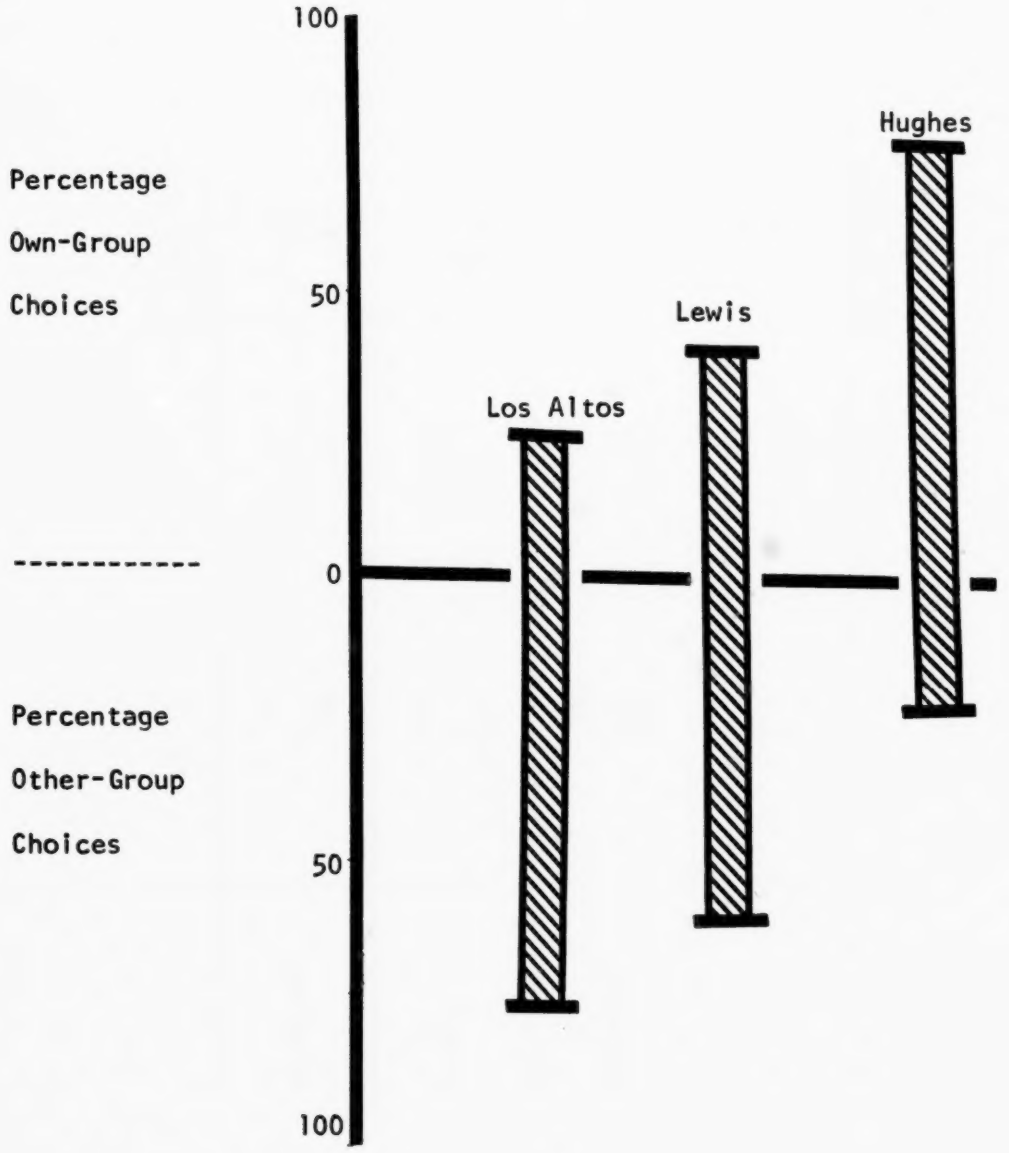


TABLE 4. Summary Table of Class Mean

Scores for Each Role in Each of the Three Schools

	School			
Role	Los Altos	Lewis	Hughes	Total
TV actor	- .38 - .39 0	-.33 -.63 -.38	.67 .82 .86	.24
Speaker	- .63 - .21 -1.00	-.56 -.56 -.71	.67 .82 .73	-1.45
Friend	-1.00 0 - .50	-.71 -.56 -.22	.83 .60 .39	-1.17
Relative	- .75 0 - .50	-.33 -.78 -.17	.83 .64 .19	- .87
	-5.36	-5.94	8.05	-3.25

TABLE 5. Summary of Analysis of Variance

for Own-Group Choice Scores, Schools by Roles

Source of variation	Sum of Squares	df	Mean Square	F	P<
Between Schools	10.44	2	5.22	64.62	.01
Between Roles	0.18	3	0.06	--	NS
Interaction	0.19	6	0.03	--	NS
Within Schools	1.94	24	0.08		
Total	12.75	35			

Insert Figure 2 Here

Conclusions

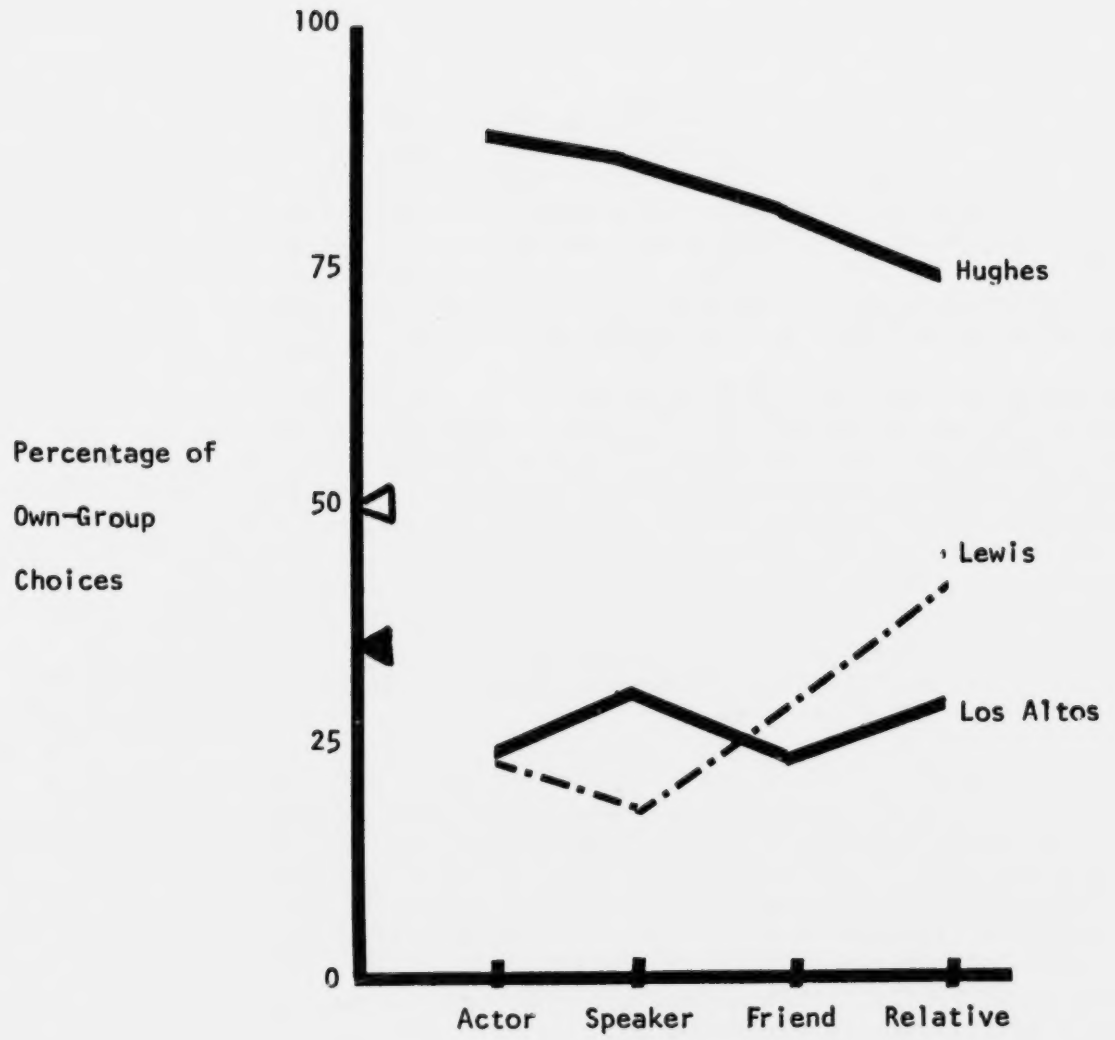
As we noted at the beginning, the findings in which the most confidence may be placed are those which were consistent over two or three of the studies, despite differences in casts, subjects, and tasks. The most notable of these consistent findings was that in all three studies black students chose significantly more black actors than were chosen by white students, even though the white students chose more black actors than they would have been expected to choose on a probabilistic basis.

In the two play-casting studies, there was evidence that each group tended to choose members of its own ethnic group for the leading parts in the new play, while tending to choose members of other ethnic groups for minor roles and unsympathetic roles. There was, however, no similar differentiation in choices for social roles. This tendency to promote members of one's own race was stronger for students from Central and Hughes than for students from the all-white schools. In these two studies, white students were significantly more likely than non-white students to cast pairs of related roles interracially. There was no evidence, however, that the students from any of the schools were influenced by naturalistic considerations in their choices of roles--e.g., no group consistently tended to give a large number of choices to white actors for the roles of obviously white "establishment" figures such as Anthony or Richwell.

In the second play-casting and the social role study, there were no significant differences between the two all-white schools in regard to choices given to white and non-white actors. Just as the obvious preference of blacks for blacks contradicts conclusions drawn from studies done before "black pride" became an important sentiment among young Negroes, so the overchoosing of non-whites by whites at both SES levels contradicts both the findings of earlier studies of white preferences and the common observation that racist feelings are stronger among working class whites than among upper-middle class whites.

If this overchoosing of non-whites for dramatic roles and, even more strongly, for social roles is taken as evidence of the white students' identifying with, empathizing with, and even preferring actors of other ethnic groups, then the question must be asked, How is this finding compatible with everyday experience and with the simple fact that records of our interviews with both adults and students at Los Altos and Lewis are filled with expressions of anti-Negro and anti-minority feelings, sometimes overt, but more often cast in the familiar code phrases: "different," "lower class," "rowdy," "less sophisticated," and so on?

FIGURE 2. Percentages of Own-Group Choices
by Each School for Each Social Roles
(Social Role Study)



◁ = percentage of whites in cast seen by Los Altos and Lewis students

◀ = percentage of blacks in cast seen by Hughes students

The explanation may be along these lines. Only about 50% of the students in the sample classes at both white schools were participating in the Project, although almost all the students had seen at least one play previously. In contrast, more than 75% of the students from Hughes were participating. (Almost all of the students at Central participated, but this was because the Central administration made attendance practically mandatory. The administration in the other three schools were quite permissive about attendance.)

The attendance figures for the white schools would permit the inference that strongly prejudiced students had, before this study began, simply withdrawn themselves from participating in an interracial program that they found distasteful, so that the participating white students were representative not of all the students at the white schools, but of that portion of the students who were committed or sympathetic with minority aspirations or who were comfortable in interracial situations.

We had asked non-participating students to explain to us why they had not attended the play in question. Between five and ten per cent of the replies from white students indicated that the pupil had not attended the play because he was absent from school for some legitimate reason. Many more explained they had chosen not to attend because of the pressure of studies, dissatisfaction with the quality of the previous plays, or just because they did not care for theatre. Very few of the explanations touched on racial matters, and most of these were phrased in terms of dislike for the behavior of students from the black schools with whom they attended the plays.

Contrary to this, interviews with both students and teachers often elicited the explanation that many white students had stopped participating in the program because they could not enjoy the show in the company of black students who persistently misbehaved. It would be an injustice to interpret such explanations as invariably being tinged with racial prejudice, since relatively small numbers of students from particular black schools were, objectively, a consistent embarrassment, especially to their more responsible classmates.

It cannot be established, then, from the information at our disposal, whether the white students participating in the program differed from those who had discontinued their participation. But the hypothesis is a more reasonable one than the available alternatives--that racial feelings among whites are negligible or that the choices made in situations such as the ones in these studies are unrelated to actual sentiments.

So the conclusion to be reached from the data would have to be that black students strongly preferred black actors for both social and dramatic roles, while there was a substantial minority of white students who either ignored race and made their choices on other grounds or actually tended to prefer non-whites for these

roles, with this minority being nonsignificantly larger among upper-middle class white students than among working class white students. The patterns of preference, however, at least among those students still participating in the Project, are not significantly related to sheer amount of experience with interracial theatre. Whatever factors in the larger culture may account for the patterns of preferences which are described in these studies, it is clear that they have drastically altered the patterns of preferences described in research done up through the middle sixties. Black students have become much more chauvanistic, racially, while young whites have become much less sure about what is the place that non-whites should be kept in. To put it another way, the perceived dissimilarity between whites and non-whites has, apparently, decreased for whites while it has dramatically increased for blacks.

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THE RESPONSES OF BLACK AND WHITE STUDENTS TO PHOTOGRAPHS OF AN INTERRACIAL DRAMATIC SITUATION

James Hoetker

and

Gary Siegel

In this study, a series of photographs of a dramatic scene, in which the races of the "actors" were systematically varied, were used to evaluate hypotheses about how the responses of black and white students might vary as a function of the proportions of black and white actors in a dramatic scene.

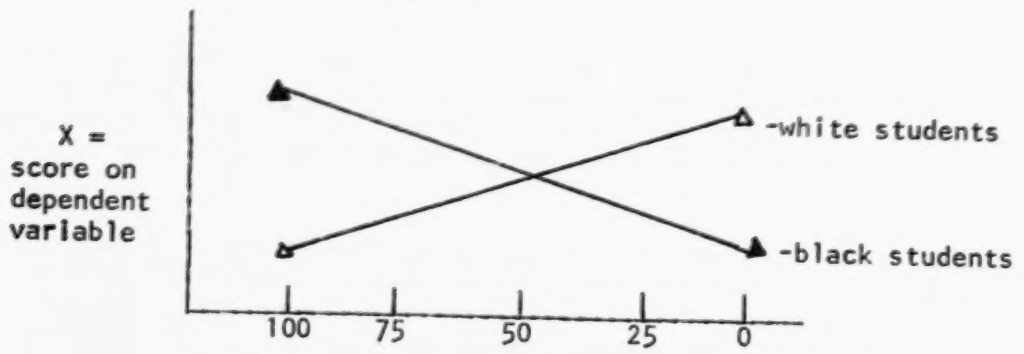
Our earlier investigations in this series had found (1) no significant differences between students of different races in semantic differential ratings of aspects of an interracial production; (2) a general lack of outright hostility among students to the casting of minority actors and actresses in "white" plays, but a good deal of such hostility among teachers and administrators;[1] (3) a pattern of black students overwhelmingly expressing a preference for black actors and actresses, but with white students expressing no similar preference for white actors and, in fact, tending to overchoose blacks; (4) a willingness among both black and white students to assign actors to new roles without regard for naturalistic expectations about the race of the person who could play a particular role in real life; (5) a definite but statistically nonsignificant tendency for students of all races to assign actors of their own race to important and sympathetic parts and actors of other races to unsympathetic parts; and (6) little evidence of a relationship between responses to interracial theatre and amount of experience with interracial theatre.

On the basis of these previous studies of the responses of the current generation of Los Angeles students, we would have expected differential responses from black and white students to variations in the racial makeup of the group of actors in the pictures in this study, but we would not have expected that white and black students' responses would be diametrically opposed, and we would have predicted that black students would respond more strongly than white students to the racial characteristics of the stimulus situation.

On the basis of previous work on similar problems, there were two not quite incompatible types of predictions that we might have made about the effects of racial variations in the stimulus situation upon students of different races. The first of these would be based on the assumption that each group of students would perceive as the normal situation one in which all the actors were of the students' own race, so that responses would be a function of a departure from expectations

as successively more actors of the other race were added to the cast. This was the assumption made by, for instance, Thompson (1949) and Light (1955), who, in discussing the development of projective techniques for use with various ethnic groups, recommended using materials which reflected the subject's culture and race. Hypotheses based on this assumption (if scores on the dependent variable increase as a function of dissonance due to the departure of the situation from expectations) would predict finding the situation illustrated in Figure 1.

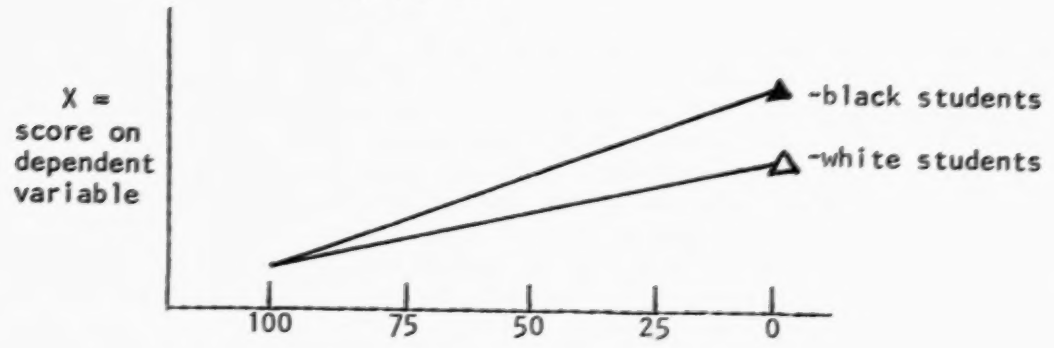
FIGURE 1.



However, as Riessman and Miller (1958) and Zubin, Eron, and Schumer (1965) have pointed out, both black and white students have grown up in a society in which the media and the bulk of the literary and artistic output are white and reflect white culture. This is no longer as true as it was even five years ago, but both black and white students have grown up in a culture where the presentations of all the media have been predominantly white except for a very few all-black novelties (Green Pastures, Raisin in the Sun, Amos and Andy, "soul" specials on TV); so it would be reasonable to expect students of both races to perceive as unusual more than a token representation of blacks in a "white" show, play, or book. By this reasoning, the all-white scene would be taken as the norm by both white and black students, and each additional black actor introduced would be a further departure from the norm. But student responses would be differentiated still, according to evidence from recent studies, with the blacks probably responding more strongly to the increasing blackness of the stimulus situation, and the whites responding less strongly. Studies by Kirkhart, 1963; Derbyshire and Brody (1964) and Maliver (1965), our own previous work, and the daily newspapers and newscasts document the growth of black pride and black solidarity, while such studies as those by Bettelheim and Janowitz (1964) and Secord and Backman (1964), and Karlin, et al. (1969), as well as our own studies earlier in this series, suggest that younger whites, outside the South, at least, are becoming more tolerant and less aware of race. Predictions based on

the assumptions of the all-white situation being perceived as normal by all students, and taking into account the evidence that black students are more likely to respond strongly to racial variations in the stimuli than whites, would take the shape of Figure 2.

FIGURE 2.



A consideration which would complicate either of these sorts of predictions, is that there may be a threshold at which responses become a function of the racial characteristics of the stimulus situation, a point at which departures from the subject's norms become great enough that the subject begins to respond to race rather than to other characteristics of the stimulus situation.[2] For example, a white student might respond in precisely the same way to a scene played by four white actors as to one played by three white actors and one black actor, but he might begin to respond quite differently when a second or a third black actor was added, as his anxieties were aroused or stereotypes activated. This threshold effect, further, might be different for blacks and whites, and, regardless of which of the sets of assumptions outlined above is closer to the truth, might produce very complex or nonlinear relationships between the races of the subject and the racial characteristics of the stimulus situation. With the set of pictures we used, in which there were only four roles to be filled, such a threshold effect would have relatively little room to operate, but the crucial variations would probably be those in which there were two characters of each race and those in which there were three characters of one race and one of the other.

The Variations in the Stimulus Photographs

The original plan for this study had called for the use of a performance of a one-act play to serve as the stimulus to which students would be asked to respond by writing a brief story. The roles in the play were to be systematically rotated among actors of different races as the play was performed for student audiences from different schools. Although the management of the Inner City Repertory Company was wholly cooperative, this proved to be impractical, primarily because of the large number of actors and actresses who would have been tied up by

such a rotation of roles and because of other demands upon the company's time which made it impossible for them to assure us that particular players would be available to perform for particular audiences.

We turned, then, to the use of photographs of a dramatic scene as the stimulus to which we would ask students to respond. An acting class in a well-integrated high school in the St. Louis suburbs cooperated with us in the making of the photographs. A basic scene was worked out, containing two boys and two girls, grouped as couples. A sketch of the basic scene is in Figure 3. It was intended to convey a strong conflict while still being rather ambiguous about the nature of the conflict. The poses were held constant and the physical characteristics of the roles were varied by having all the students take turns playing the different characters in the scene. The race of each of the characters was systematically varied until the set of photographs obtained included all the variations of casting in which we had decided we would be interested.[3]

INSERT FIGURE 3 HERE

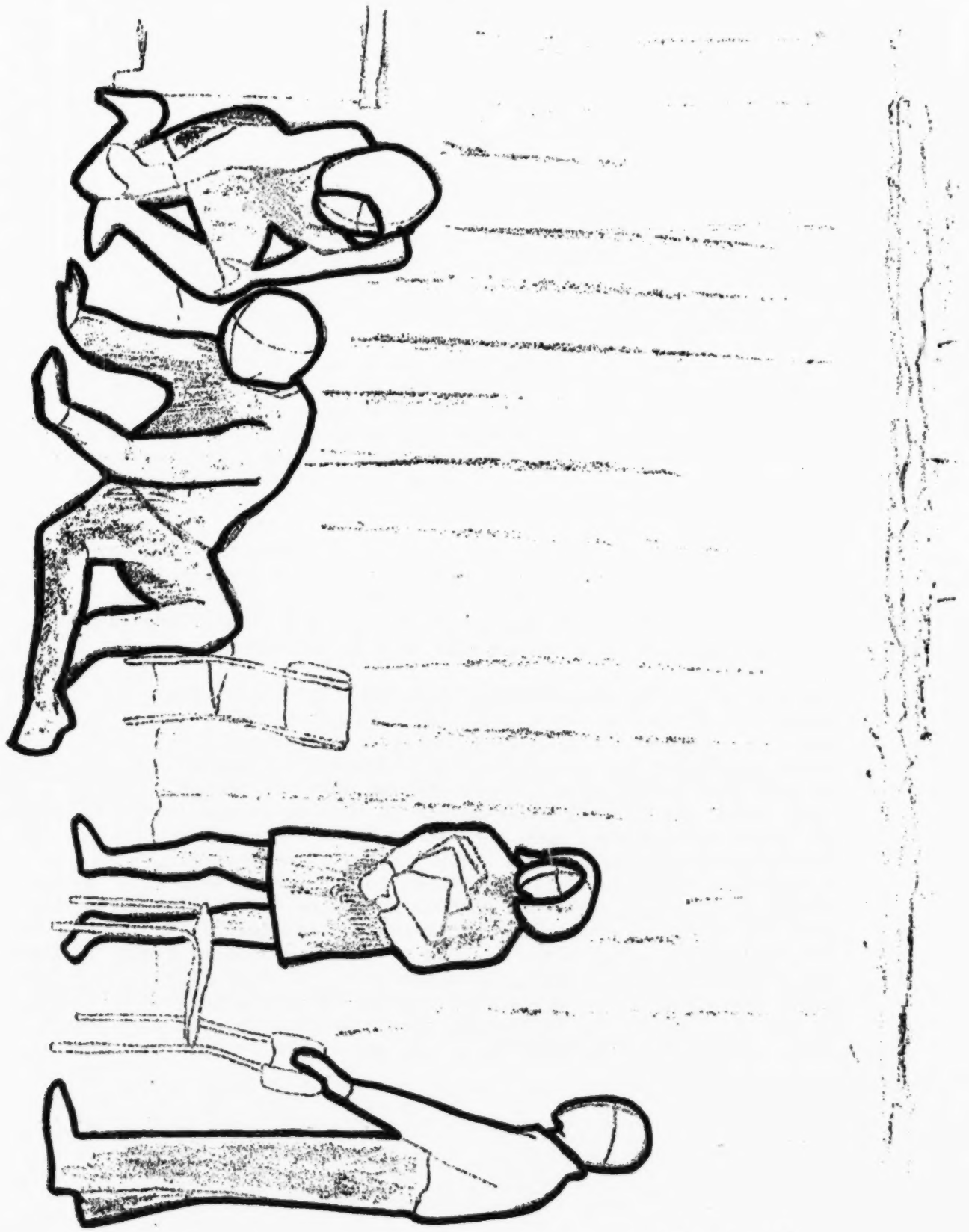
In the plan that had been drawn up for taking the photographs, the number of black and white students was varied as in Table 1, starting out with the all-white cast and adding one black "actor" at a time from the right of the photograph. This gave us a five level variable we called "proportion."

TABLE 1. Description of the Five

Levels of the Proportion (Photograph) Variable

	Position in the Photograph			
Level Number	Left (Female)	Left-Center (Male)	Right-Center (Female)	Right (Male)
1	White	White	White	White
2	White	White	White	Black
3	White	White	Black	Black
4	White	Black	Black	Black
5	Black	Black	Black	Black

FIGURE 3. Sketch of the Basic Situation in All Versions of the Photographs Used in the Threshold Effects Study



Within this general scheme, roles were also varied by race at levels 2, 3, and 4, with two additional photographs being made at each level. At level 2, variations were made in which the single black character was, first, the boy lying on the floor, and, second, the girl leaning over the boy on the floor. Table 2 summarizes the variations in the complete set of photographs used in the experiment. At level 4, the

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INSERT TABLE 2 HERE

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variation made the single white character, first, the boy on the floor, and, second, the boy standing. Each of these variations, it will be noticed, except for 3a, gives at least one integrated couple.[4]

Task Description

A test package was made for each student, a 9" x 12" envelope containing one 8" x 10" glossy photograph mounted on cardboard, an instruction sheet, and answer sheets. The envelope containing the materials and each item in the package was marked with the code number of the photograph in question. The procedures for administering the test are described below, and copies of all the materials are included in an appendix to this report.

The photographs were, in this study, to be used in much the same way as the pictures in the Thematic Apperception Test are used, but the scoring was to be different. Basically, each student's task was to write a short story about the photograph he had been given. The instructions accompanying each photograph were as follows:

> INSTRUCTIONS: The accompanying photograph is of students rehearsing for a play about conflicts between groups of students in a modern big-city high school. Study the photograph carefully; try to imagine what happened to lead up to this particular scene; try to imagine what may happen next. Then pay particular attention to the boy second from the left, the one who is on the floor. Then in the space below, and on the other side of this sheet if necessary, write about this character. Tell us, for instance, such things as who he is and what sort of person he is; tell us what his relations are to the other three characters in the scene; tell us what he has just done or had done to him, and what he will do. Write, in other words, a short story about the scene in the photograph, centering your attention on the one boy. Refer to the photograph as often as you wish, and use details from the photograph in you story.

TABLE 2. Summary Table of Variations

by Race and Sex, in the Stimulus Situation

Position:	Left	Left-Center	Right-Center	Right
Variation No.				
1	White Girl	White Boy	White Girl	White Boy
2A	White Girl	White Boy	White Girl	Black Boy
2B	White Girl	White Boy	Black Girl	White Boy
2C	White Girl	Black Boy	White Girl	White Boy
3A	White Girl	White Boy	Black Girl	Black Boy
3B	Black Girl	White Boy	Black Girl	White Boy
3C	White Girl	Black Boy	White Girl	Black Boy
4A	White Girl	Black Boy	Black Girl	Black Boy
4B	Black Girl	White Boy	Black Girl	Black Boy
4C	Black Girl	Black Boy	Black Girl	White Boy
5	Black Girl	Black Boy	Black Girl	Black Boy

Subjects

The subjects in the study were twelfth grade students in English classes in two Los Angeles High Schools. The two schools were chosen to have different racial compositions but similar socioeconomic characteristics, both the all-white and the all-black school being just about in the middle of the distribution of mean family income for schools in the Los Angeles district.

Since this was something of a pilot study, and the coding of the stories was going to be a long and expensive process, we wished to use the smallest possible sample of students compatible with the analyses of the data we planned to make. So three classes in each school were chosen at random, one at each of three ability levels, giving us a cross-section of the twelfth-grade students in each of the schools. In the all-white school, this procedure gave us usable responses from 27 boys and 25 girls; and in the all-black school, it gave us responses from 33 boys and 29 girls.

Method of Administration

A type of matrix-sampling or item-sampling was used to obtain the largest possible number of score estimates from the relatively small number of subjects. Test materials for each class included three copies (in the envelopes described above) of each of the photographs used in the experiment. Photographs were randomly arranged within each complete set, but the sets were kept separate so that, even in the smaller classes, at least two students would be responding to each photograph. Each student was given an envelope and asked to read the instructions taped to the envelope, which directed him to remove one answer sheet and the photograph and gave further instructions on how to proceed. After any questions about the meaning of the instructions had been answered, the students were given ten minutes to write their stories. Then they returned the photograph and the completed answer sheet to the envelope and the envelopes were collected. Each student, according to this procedure, responded to only one photograph and should usually not have been aware that his classmates were responding to photographs that differed from the one he had been given.

Dependent Variables

In our analyses of the coded stories, we looked for systematic variations along a number of dimensions as a function of the proportion and roles of the various races and the race and sex of the respondents. In coding the stories, we wished to stay as close as possible to objective description of the characteristics of the stories, and not to get involved with psychoanalysis or even with the subtler sorts of interpretations that have characterized the research on need achievement.

Those characteristics of the stories which we judged might vary along with differences in responses to the photographs were identified, and a set of protocols for the scoring was drawn up on the basis of preliminary codings of a sample of the stories. The coded characteristics of the stories became the dependent variables in the study. The

coding process yielded several different sorts of variables, which are named and discussed below.

Continuous Variables

1. Number of words? It has been well established that the number of words written in response to a projective test stimulus is a good indicator of the degree to which a subject has become affectively involved with the situation portrayed in the stimulus. We wished to see if variations in the independent variables were associated with the length of the stories written in response to them.

2. Number of mentions of race? This variable was measured in two ways--number of explicit mentions of race and number of mentions divided by the number of words in the story. These were taken as measures of the saliency of the race of the students in the photograph to the respondent.

3. Number of adjectives, adverbs, and phrases serving adjectival and adverbial functions? This measure was taken as an indicator of the vividness or concreteness of the story, and it was computed in two ways--number of such modifiers and the number of them divided by the total number of words. In the coding, such modifiers as "perhaps," and "maybe," were not counted. This was the only category in which it was not possible to get almost perfect intercoder agreement, but after considerable discussion, reliability between coders and between occasions for the same coder reached a satisfactory level--an average of about one disagreement per story.

4. Number of negative epithets applied to characters? This was taken as another measure of affect. The number of times a respondent referred to a character by a derogatory term ("bully," "coward," "troublemaker") and the number of such references divided by the number of words were coded.

5. Level of interest expressed in seeing a performance of the play? This was a separate question (see the appendix), calling on the student to report how interested he would be in seeing a production of the play he had just written about. (Coded 1-5.)

Categorical Variables

1. Descriptive

   A. Is the conflict in the story explicitly interracial? (E.g., "The white boy hit the brother.") (Coded: Yes, No, Not applicable.)

   B. Does the story involve physical violence? (Coded: Yes, No.)

   C. If there is a conflict, what is the race and the role of the aggressor? (Double coding: Black, White; Boy standing, boy on floor.)

   D. Are the characters in the story given names? (This was taken as another indicator of vividness and affective involvement; it was coded: Yes, No.)

2. Interpretive

   A. What is the writer's evaluation of the boy on the floor? (I.e., does he make a good-bad judgment about him? Coded: Good, Bad, Not clear.)

   B. What is the writer's affect toward the boy on the floor? (I.e., is he sympathetic toward him, in whatever plight he has placed him in? Coded: Sympathetic, Unsympathetic, Not clear.)

3. Analytical (The categories for coding these characteristics were developed from the content of the stories and are reported fully in a later section.)

   A. What is the relationship of the kneeling girl to the boy on the floor?

   B. What is the relationship between the boy standing and the boy on the floor?

   C. What is the theme of the story?

General Observations on the Stories

The students were given only ten minutes to examine the photograph and write a story, so the stories were rather brief, usually less than 100 words. The girls, as might have been expected, wrote longer stories than did the boys.

Racial References

Although there were a very few white racist and black militant themes, and although the presence of racial references did vary as a function of the racial composition of the photographs, race did not figure in any way in the majority of the stories. Only 38% of the white students and 32% of the black students either identified a character by race or mentioned race as a factor in the situation pictured in the photograph. There were no derogatory racial epithets in the stories and not a single use of an argot term (blood, shade, Charley, gray, etc.) for the races. The only racial tags that were used were these: white, black, Negro, brother, and sister. These were most often used neutrally, just to identify the character being spoken about. But one black student, responding to the all-white picture, managed to inject the racial issue by writing about a fight between a liberal and a bigot over the matter of bussing black students. In the majority of the stories written by white students in which race was thematic the story condemned racism or expressed sympathy for the plight of black students. For example, in response to picture 4A, a white boy wrote:

> John is a Negro student who attends a big city high school. In some ways he is like his classmates, yet John is a confused boy with many bitter attitudes, partially because of society's pressures on his race, and partially because of an inner struggle with himself. John has been seen around school with a white girl whom he likes very much. Many of his own race have been bugging him about this. Eventually, pressures and tempers flare up and John must stand against some of his friends and classmates in order to defend himself. Upon this day, one of his classmates, Bill Smith, knocks John's chair over to embarrass him in front of his girl. Many more events happen to John, but out of those events John finds what he wants and becomes a stronger human being.

Boy-Girl Relationships

The above story can also stand as an illustration of another striking feature of the students' stories--the almost complete absence of any but sympathetic responses to interracial couples. There were, however, only six stories (out of 123) in which racially mixed couples figured. (By comparison, only seven stories by black and six by white students included "romantic" relationships between a boy and girl of the same race.) In those few cases where an interracial romance was part of the theme, the author was either nonjudgmental or sympathetic or introduced the mixed couple in order to condemn those who objected to it. For example, this is a white boy's story about photograph 2A:

> The white boy came up on the black boy and the girl and said something filthy about it. He is a bully who thinks he is B.M.O.C. The girl to the left is his follower who loves him, but is unnoticed. He probably likes the girl talking to the Negro, and he'll probably try to get back at him for knocking him down.

Another white boy wrote this, reacting to photograph 4A:

> This scene reflects an attitude toward racism. The young man on the floor is in love with the white girl. She has just told him that the two of them can never work out. So he grimaces with a broken heart, for he truly loved her. And now he wishes to die. Although she is trying to make him understand she's not the only girl in the world, he disagrees!

Or this one by a black girl in response to photograph 4A:

> The boy on the floor has been talking and joking with the white girl. (They are girlfriend and boyfriend.) The other black boy and his girlfriend started to bother them, ridicule them. One thing led to another and the boy with the black girlfriend knocked down the boy with the white friend. This boy will not attempt to fight back--he will, instead, get up from the floor, take his white girlfriend, and walk away.

There was not a single instance of a mixed couple's being presented for the purpose of condemning or blaming them.

The minimum of attention paid to the interracial couples in the photographs is in part explained by the fact that the girls in the photographs played little part in the stories written by most students. In 18 of 63 stories written by black students and in 25 of the 60 by white students, the girls are not mentioned at all. Of the two girls, the one kneeling at left is most often included in the stories, and usually she is described as a student or a teacher who is "concerned" or trying to help the boy on the floor.

Violence

Considering the nature of the scene that was presented to them, there were an astonishingly large number of stories in which violence played no part. As we read the stories, we sometimes got the impression that students were going out of their way to keep violence out of their stories. Forty-two percent of the stories written by blacks and 43% of those written by whites had some element of violence, but accidents, clumsiness, physical handicaps, games, lost contact lenses, and--especially among the black boys--drugs, were more often invoked than fights to explain why the one boy was on the floor. (Black students--and some white ones--fairly often linked drugs and white racism, depicting drug taking as a black male's last resort in an intolerable society.)

Interestingly, in both groups the highest incidence of violent themes was associated with photographs composed exclusively of members of the respondent's own race.

The occurence of physical violence in a story was not highly correlated to the occurence of explicit racial references for either group, but violence explicitly arising from racial conflict was somewhat more frequent in stories by whites (13 stories out of 60) than in those by blacks (8 out of 63).

Another interesting, though statistically non-significant, finding was that in those stories which contained violence, both white and black students more frequently identified the member of their own race as the aggressor. This can be seen in the following table:

Race of Aggressor	Black Students	White Students
Own race	44%	46%
Other race	28%	36%
Race unspecified	28%	18%

(The "unspecified" agressor was generally someone who had already left the scene, thereby allowing the author to avoid relating the violent story to the racial composition of the photograph.) In photographs in which the two boys were different races, the students tended to see the boy of their own race as the initiator of the conflict, whether he was the boy standing or the boy on the floor. There also was notable a tendency for black males, in stories in which the theme was violent, to denigrate the "loser" in the fight if he was black; white students and black girls typically expressed some sympathy for the "loser," regardless of his race, unless he was a bully getting his just deserts.

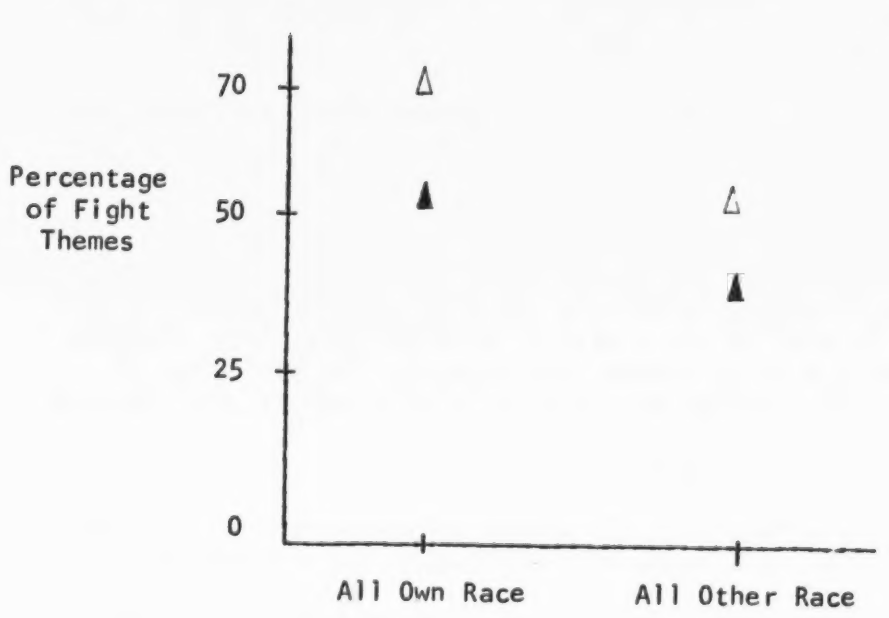
Themes

"Theme," as we use the term here, is practically synonymous with "explanation for the one boy's being on the floor." As already noted, the themes of the stories were varied, with fewer stories being concerned with fights and/or racial conflicts than we had anticipated. Frequencies of the various themes of the stories written by the students in the two schools are given in the following table.

Theme	Blacks	Whites
Drugs	15	6
Fight between students	25	27
(Racial fight)	(8)	(13)
Emotional problems	6	10
Sickness	6	3
Clumsiness, accident, etc.	6	7
Other	5	7
N =	63	60

The differences in the frequencies of various themes between students in the two schools are not significant. Neither are the differences between the schools significant as a function of the racial composition of the photographs eliciting the stories. Incidence of fight themes, for both black and white respondents, was highest when all four characters in the photo were of the respondent's own race. Figure 4 gives the percentages of fight themes in all stories written by white and black students to photos in which the characters were all of their own or all of the other race. Similarly, a higher incidence of stories having a fight theme was found among those students who saw photographs

FIGURE 4. Percentage of Fight Themes for Black and White Students



in which the two boys were the same race as themselves (50% for both Black and White students), than among those students who saw two boys not both of their own race (in which cases only 26% of black students and 38% of the white students wrote stories involving a fight). The case seems to be that each race perceived the other race as having an internal solidarity its own race lacked.

Another interesting finding was the relatively high percentage of stories in which the use of drugs was thematically important. Black students (24%) were somewhat more likely than whites (9%) to use drug themes and, across both racial groups, boys (19%) more likely than girls (15%). White students who wrote about drugs usually did so to explain (always sympathetically) the behavior of a black student in an oppressive and frustrating situation (e.g., a predominantly white school).

Humor in the Stories

Finally, the stories were notable for an absence of humor. Why students should take a task such as this with such seriousness is not at all clear, unless they have learned in school that everything in school is serious. Some of the stories were, of course, unconsciously humorous--such as the following terse masterpiece, quoted in its entirety:

> He's just had a fight with the brother on the right and he lost it. He must have said something he shouldn't have so he got wasted.

Only in the low ability white class were there any conscious attempts at humor, and one must wonder whether the failure to take school tasks dead seriously might (along with their spelling) explain why such obviously creative students were in a low ability class. Some samples.

> (3B) Well, the guy on the floor's name is Harvy, and he is president of the KIP club (KIP stands for Knowledge is Power club) and the reason he's on the floor is because the other guy standing there just hit him. His name is Clide and he's president of the Down With Power club. They are really artch rivals in school. (Anywhere else for that matter.) We have this here conflict. Clide thinks it's really funny, but Nancy (the girl with the books in her arm) doesn't quite know what to think....
>
> (5A) The boy on the floor is probably showing the girl a new dance step. The girl on his left is probably wondering how he did that. The boy in the white shirt probably thinks he looks ridiculous on the floor. The girl with the books in her hand is wondering if he can get up on his own or something. The girl on his left is maybe looking over the veins in his arms.
>
> (1) Scene--four students sitting calmly discussing the discussion they had in the class about Marriage. With only a few second left before the bell rung, Rosey put Joe on to fall out of his chair after she nagged him for the coment he made on pre-marriage proposals. Then as the exsittment snapped, Joe flashes onto the scent of a distinkly odor from the smoke rising from the crack in the floor. This sure enough attracked the attention of the other students sitting behind them. So Sue and Bill suddenly stood up and began to be aware of their friends in the basement below them. Bill wishing he could join his friend, hopes his friend don't get busted.

ANALYSIS AND RESULTS

The Independent Variables

There were five independent variables which could have concerned us in the analysis of the data from this study. These were (1) the composition of the photograph, (2) the race of the respondent, (3) the sex of the respondent, (4) the ability level of the respondent, and (5) the respondent's prior experience with interracial theatre. Preliminary analyses showed that ability level main effects approached significance only in respect to the number of words written; in addition, there was the consideration that, with only one class of each race at each ability level, ability level effects in each school would be confounded with teacher and class characteristics effects. So ability level was discarded as a factor in our analyses. The inclusion of a class at each ability level, then, gave us approximately equal representation from all ability levels in our sample of students, but did not enable us to investigate ability effects or interactions between ability and the other factors.

Prior experience with theatre, defined as the number of plays seen by the student in the course of the Project (0-12 plays), was used as a covariate in all of the analyses of variance to be reported, but in no case was there anything near to a significant association between prior experience, so defined, and the other factors. At another stage in the analysis, the prior experience factor was differently defined--as "high" versus "low" for certain analyses of categorical dependent variables, and as "continuing attendance" versus "discontinued attendance" in analyses seeking to determine if there were systematic differences between students still participating in the program and students who had attended but then ceased to do so. No relationships between theatre attendance and responses were found in any case.

We had, therefore, three independent variables of interest--sex, race (or school), and photograph. Sex and race were, of course, two-level factors, and the photograph factor had five levels, but was dimensionalized in several different ways at different stages of the analyses.

Dependent Variables for the Initial MANOVAs

Five of the dependent measures described earlier had the properties of continuous variables: (1) the number of words in a story; (2) the number of adjectival and adverbial modifiers in a story; (3) the number of explicit mentions of race in a story; (4) the number of negative expletives applied to characters in a story; and (5) the level of interest expressed in seeing the play imagined by the respondent. The second, third, and fourth of these were computed not only as frequencies, but as ratios--the number of occurences in a story divided by the number of words in the story--which gave a sort of emission rate for each of these features.

Using the modifier, mentions of race, and negative expletives measures--first in their frequency form and then in their emission rate form--a series of multivariate analyses of variance were carried out.

The number of modifiers in a story was found to correlate about .88 with the number of words in a story, while the modifiers per word rate was much more independent of number of words ($r = .36$), so the latter (rate) measure only was retained as an indicator of vividness or concreteness. Expressed level of interest was found to vary hardly at all around a mean of slightly more than 2.6 ("moderate interest"). Expressed level of interest was, because of the lack of variation, uncorrelated with either of the two putative measures of motivation or involvement, number of words ($r = .02$) or rate of modifiers ($r = .03$), and the measure was discarded from further analyses. The other measures were much less closely related to number of words. Negative expletives occurred too seldom to be of major importance, but their frequency was correlated with the number of mentions of race ($r = .27$; $P < .05$). The rate of occurence of negative expletives, however, was not significantly correlated with any of the other variables. The frequency and rate of mentions of race were, besides this, significantly correlated only with the number of modifiers ($r = .24$; $P < .05$) and rate of modifiers ($r = .20$; $P < .05$), in part because most mention of race would, naturally, also be included in the count of adjectives.

Turning to the results of the MANOVAs themselves, there were significant sex and race (or school) main effects upon the sets of dependent variables containing the frequency measures, while only sex main effects were found to be significant upon the sets of scores containing the ratio measures. Examination of the means and intercorrelations showed that the significant effects were largely due simply to the facts that girls wrote more than boys and certain of the other measures were highly correlated with number of words.

Construction of New Variables

The F-ratios for the tests of equality of mean vectors for the hypothesis of central interest in this study, the race by photograph interaction, did not approach significance in any case, although several of the univariate F-ratios within the sets of scores on the dependent measures did attain significance. The mean scores on all dependent variables were converted to standard scores and plotted separately for black and white students at each of the five levels of the photograph factor. It was found that a number of the curves described a tendency for scores to rise from a minimum at the all-white level of the photograph factor to a maximum at either the 75% black or the all-black level.

Plots of frequencies of the responses on the various categorical dependent measures, in some cases, revealed analagous patterns. Various ways of combining the measures were tried, and it became clear that, after discarding those variables on which there was no variation in scores between levels of the photograph factor, we were left with two groupings of dependent variables, scores on all of which had the tendency described above.

The first of these groupings contained the negative expletives measure and four of the categorical measures, all of them conceptually related as indicators of the degree of agression or violence characterizing a particular story. The new variable constructed by reweighting and linearally combining these measures, as explained in the following table, was called "aggressive arousal." The range of scores on the new "aggressive arousal" variable could range from a minimum of zero to a maximum of 7 for any particular story.

Insert Table 3 Here

The second new variable we referred to as "motivation." It consisted simply of the number of words plus the adjective-adverb rate, with the latter multiplied by 1,000 so that the range of scores for most subjects on both variables would be equivalent. This second new variable may be looked on as a measure of the formal characteristics of student stories, while the first new variable is a measure of certain aspects of the contents of the stories.

The third variable which remained in the final analysis was the rate of mentions of race, which remained of interest, but which did not logically belong with either of the new measures, since it was clear there was no necessary relationship, in the stories themselves, between the mention of race and the arousal of aggression, and because the mentioning of race was not a formal characteristic of a story.

In the final analysis of variance which we undertook, we reconceptualized not only the dependent measures, but the photograph as well. The basic contrasts were, of course, between the mean scores at the five levels of the photograph factor. But several other meaningful contrasts suggested themselves. The first of these was between the means for the first, 100% white, photograph and the fifth, 100% black photograph. The second was between means for the first photograph and the averaged means for the three racially integrated photographs. The third was between the means for the two predominantly white photographs (1 and 2) and the two predominantly black photographs (4 and 5). And the fourth was between the mean for the racially balanced photograph (3) and the averaged means of the two racially unbalanced photographs (2 and 4). The following table gives these contrasts in symbolic form.

Insert Table 4 Here

TABLE 3. Weights for Construction

of the Aggressive Arousal Variable

Original Variable Name	Level	Weight Assigned in Recoding
A Theme	1 Drugs	1
	2 Fight	2
	3 Emotional problems	0
	4 Sickness	0
	5 Clumsiness, etc.	0
	6 Other	0
B Negative Expletives	1 Used	1
	2 Not used	0
C Role of Standing Boy	1 Friend	0
	2 Antagonist	1
	3 Other	0
D Author's Evaluation of Boy on Floor	1 Positive	0
	2 Negative	1
	3 Neutral	0
E Author's Affect toward Boy on Floor	1 Sympathetic	0
	2 Unsympathetic	1
	3 Neutral	0

AGGRESSIVE AROUSAL score = the sum of recoded variables A, B, C, D, E

TABLE 4. Symbolic Contrast

Vectors for the Photographic Effects

Levels of the Photo-graph Factor	Means	Contrast Vectors 1-5	1-(2+3+4)	(1+2)-(4+5)	3-(2+4)
1	1	1	3	1	0
2	1	0	-1	1	-1
3	1	0	-1	0	2
4	1	0	-1	-1	-1
5	1	-1	0	-1	0

Results of the MANOVA

The new "motivation" variable, and the rate of mentions of race, first of all, were quite independent of the other two, as shown in the following correlation matrix, but the rate of mentions of race is signi-

TABLE 5. Intercorrelations

of New Variables

	Aggr. Arsl.	Motivation	MR/W
Aggr. Arsl.	1.00		
Motivation	0.16	1.00	
MR/W	0.39	0.14	1.00

ficantly correlated ($P < .05$) with "aggressive arousal," which may be taken as evidence either that as the saliency of race increases so does the incidence of aggressive characteristics in the stories, or that those authors who are most likely to write stories full of aggressive characteristics are those most likely to find race salient enough to mention.

Taking the main effects first, there were no significant effects of race. For the photograph factors, only the contrast between the means for the all-white and the all-black photograph yielded a significant (stepdown) F-ratio, ($F_{1,94} = 9.36$; $P < .003$) and that only for scores on the "motivation" variable. The "motivation" mean for the all-white photograph was 66.44 and for the all-black photograph it was 85.19. So both black and white students wrote longer and more vivid stories in response to the all-black scene. This contrast will be further discussed below.

Sex main effects on the "motivation" variable were also highly significant, $F_{1\ 94} = 19.97$; $P < .0001$, but this was not unexpected and is not directly pertinent to the questions at issue here. Of more interest is a near-significant race by sex interaction ($F_{1,94} = 3.64$; $P < .06$), also involving the "motivation" variable. The "motivation" means are given below.

	Boys	Girls
Black	70.49	84.36
White	54.52	97.36

At both schools, girls wrote longer and more vivid stories than boys, but the stories written by the boys at the black school were considerably more "motivated" than those written by the boys at the white school. To put it another way, the boys and girls at the black school resembled one another much more closely in this regard than did the boys and girls at the white school.

Turning to the scores on the "aggressive arousal" variable, and considering the interactions of the extreme versions of the photographs (all-white means minus all-black means) with the other variables, we find the situation summarized in Table 6 below.

TABLE 6. Summary Table of Mean

Aggressive Arousal Scores for the Race by Sex

by Extreme Photographs Interaction

Race of Respondent:	White		Black		Total by Photograph
Sex	Male	Female	Male	Female	
Photograph					
All-white	2.00	4.50	0.67	3.00	10.17
All-black	1.75	3.50	3.75	3.00	12.00
Total by Race	11.75		10.42		
Total by Sex by Race	3.75	8.00	4.42	6.00	

To summarize the analyses of the means in this table, the main effects of neither sex ($F_{1,94} = .69$) nor race ($F_{1,94} = .02$) nor photographs ($F_{1,94} = .02$) approached significance. Neither was the race by photograph interaction significant ($F_{1,94} = .81$). However, both the sex by photograph ($F_{1,94} = 5.76$; $P < .02$) and the three-way race by sex by photographs interaction ($F_{1,94} = 6.12$; $P < .02$) were significant.

Taking the sex by photographs interaction first, it can be seen from the above table that the mean "aggressive arousal" score for all girls was higher for both the all-white (3.75) and the all-black (3.25) photographs than the corresponding scores for boys (1.33 and 2.75, respectively). But the girls' mean scores were higher in the case of all-white photograph, while the boys' scores were higher for the all-black photograph. The higher level of mean scores for girls is due to the fact, mentioned earlier, that girls wrote stories with fight themes more frequently than boys, and, to the fact that, in the construction of the "aggressive arousal" variable, fight themes were more heavily weighted than the drug abuse themes that boys frequently chose to express the aggressive elements in their stories. But the incidence of aggressive elements in the girls stories seems to be relatively independent of the racial composition of the stimulus photograph, while, for the boys, "aggressive arousal" is significantly higher in stories about the all-black photograph.

Consideration of the mean scores of black and white male students separately, in the summary table above, clearly shows that it is the black males who are primarily responsible for this state of affairs. For white males and females "aggressive arousal" scores are lower for the all-black photograph and for black females there is no difference between the two photographs. But for black males, whose "aggressive arousal" scores for the all-white photograph are much lower than those of the other categories of students, have the highest "aggressive arousal" scores of all for the all-black photograph, the scores increasing from .67 in the first case to 3.75 in the second.

It has already been noted that violent themes (which contribute heavily to the "aggressive arousal" score) were most frequent in stories written in response to a photograph in which all the actors were of the respondent's own race, as if each race saw the other as more unified and solid than itself. This tendency is most pronounced in the case of the black male students. Turning back to the stories written by these students, we find that in only about 25% of the stories written about the all-white photograph are the two boys antagonists, while they are antagonists more than 60% of the time when both the boys are black. We also find that when the boy on the floor is white, there are only two instances of a black male student's expressing a negative judgment on him, but when he is black, there are eight such instances of negative judgment. Similarly, the black male students' attitude toward the boy on the floor was judged unsympathetic twice as often when the boy was black as when he was white.

The reluctance or refusal of white students to display racial feelings or anxieties was a consistent finding in the earlier studies in this series, as was a tendency for black students to express what can probably best be described as black patriotism. But arousal of aggression in black students by a black stimulus is a new element. A plausible explanation of the case might be that physical conflict and other sorts of aggression are more common in the day-to-day life of black male adolescents than of whites or of black females; these conflicts are almost inevitably between blacks, with conflicts between whites being commonly outside of the firsthand experience of the black

male students. If these things are true, then it is reasonable to suppose that the all-black photograph would be more likely than the all-white one to contain elements which would reactivate personal memories of conflicts observed or participated in by the student, which memories would then be manifested in the stories as those features contributing to a high score on the "agressive arousal" variable. For the black male, to put it another way, it was more "natural" or "realistic" to write a "violent" story about an all-black than about an all-white situation.

The black female students present a separate problem. Why they should (like the white girls) write more "violent" stories than the boys is not completely clear, and why they should, if the above suggestion is accepted as reasonable, behave differently than their male classmates is also unclear. Perhaps, on the average, the experiences of the girls, both inside and outside of school, make them as aware as the boys of interpersonal violence, but makes them more aware that violence is a part of life in white society as well as in black. The problem, however, cannot be solved with the data at hand, and the differential responses of black boys and girls must be a subject for a future investigation.

The same three-way interaction we have been discussing approached significance ($F_{1,94} = 3.67$; $P < .06$) for the "motivation" variable, but the patterns of differences between means were quite different from those on the "aggressive arousal" variable, as shown by the summary in Table 7.

TABLE 7. Summary Table of Mean Motivation Scores for the Race by Sex by Extreme Photographs Interaction

Race of Respondent:	White		Black		Total by Photograph
Sex:	Male	Female	Male	Female	
Photograph					
All-white	149.5	226.0	169.7	184.6	729.8
All-black	195.7	297.5	191.7	273.5	958.4
Total by Race	868.7		819.5		
Total by Sex by Race	345.2	523.5	361.4	458.1	

It will be recalled that the photographs ($F_{1,94} = 9.36$; $P < .003$) and sex ($F_{1,94} = 19.97$; $P < .0001$) main effects on "motivation" were significant, with longer and more vivid stories being written in response to the all-black photograph and by girls. The school by sex interaction approached significance ($F_{1,94} = 3.63$; $P < .06$), but the sex by photographs interaction ($F_{1,94} = .08$) and the race by photographs interaction ($F_{1,94} = .12$) were nonsignificant. All categories of respondents clearly were more highly "motivated" by the all-black than by the all-white photograph, with the increases in "motivation" scores, figured as percentage of increase over the all-white scores, being quite large for the black girls (48%), moderate for white boys and girls (31% and 32%, respectively), and small for the black boys (13%). The general increase in "motivation" scores from the all-white to the all-black photographs is about what would have been predicted on the basis of the first of the hypotheses presented earlier, that scores which would increase as a function of discrepancies between the actual and expected situation would increase for both white and black students, since both shared the same sets of culturally transmitted expectations. The speculation that black would respond more strongly to an all-black stimulus is confirmed only in the case of the black girls, however. So the case seems to be that "motivation" increases significantly for both black and whites, boys and girls from the normative all-white photograph to the maximally discrepant all-black photograph, but that "aggressive arousal" scores describe a different and contradictory pattern.

Not unexpectedly, there were no differences in the rate of mentions of race in stories written to the all-white and all-black photographs, and none of the interactions involving the extreme photographs approached significance. Rather, it was the contrast between the all-white photograph and the three integrated photographs which attained significance ($F_{1,94} = 4.29$; $P < .04$). There were an average of four mentions of race per thousand words in stories written to the all-white photograph and an average of 12.25 per thousand words in stories written to the integrated photographs (2, 3, and 4), with, oddly enough, race being mentioned more often by girls in all-white stories, but more often by boys in integrated stories. Black students, on the average, were less likely to mention race than were whites.

Conclusions

There were fewer significant effects relating to race, either as a stimulus or a respondent characteristic, than we might have anticipated. Except in the case of the rate of mentions of race, there were no significant main effects of the photographs factor except those which contrasted the all-white and all-black levels of the photographs. "Motivation" for all subjects was significantly higher in stories written to the all-black photograph, presumably as a function of the unusualness of an all-black dramatic situation. "Aggressive arousal" scores also varied significantly, but not in accordance with predictions that might be made from a simple discrepancy hypothesis, and it was suggested that reference needs to be made to the real-life experiences of the black males to explain the low "aggressive arousal" scores of their all-white stories and the very high incidence of violence in their all-black stories.

So the patterns described by the "motivation" scores conform to those predicted by the first or common expectations hypothesis, while the patterns of the "aggressive arousal scores" may best be described by a qualified version of the second hypothesis, that whites and blacks have internalized different normative expectations. Further research is, of course needed to refine these insights.

Analyses of the stories written by the students revealed that race, racial conflict, and interracial romance are not of nearly so great a concern to the students involved in this study as they have been to adult subjects involved in earlier studies of interracial relations; thematically, the relative scarcity of themes of violence, and the relative abundance of drug abuse themes were notable, as was the fact that girls of both races wrote violent stories more often than boys. The finding that violent themes were at a maximum, not when the dramatic scene was integrated, nor when all the actors were of the opposite race, but when they were all of the respondent's own race, is worthy of further investigation.

It seems likely that, by choosing for this experiment two schools with equivalent standings on socioeconomic indicators, we created a situation in which response differences between the races were minimized, and that if the experiment were repeated in, say, a black ghetto school, larger between-races effects might be found. The black students in the study, by American Negro standards, were from upper-middle and upper-class families, upward mobile and generally well-attuned to the school environment. They were, basing the judgment on other evidence gathered earlier in the same school, much more often cautiously liberal than militant, and the differences between black boys and girls on "aggressive arousal" scores should be interpreted against this background, since the finding suggests that, even outside of the ghetto, the black male and the black female do not necessarily respond similarly to social stimuli.

The white students, at the same absolute socioeconomic level as the blacks, were, by White American standards, lower-middle and working class students, and the relative absence of racial anxieties (or the deliberate suppression of them) in the stories accords with the findings of our earlier studies, which gave the general impression that racial differences as such are neither an interesting nor a fashionable topic among the majority of white youngsters at any socioeconomic level.

FOOTNOTES

[1] See the sections reporting student and teacher opinions in Los Angeles in the "Reactions" volume of this report.

[2] Secord, Bevan, and Katz (1956) in a study of the Negro stereotype showed photographs of blacks and whites to white high school students. They found that the assignment of stereotyped attributes was a function of whether a person was perceived as black or white and not the degree of physical Negroidness of the picture. They found that once the categorical threshold was crossed (i.e., once the photographed person was perceived as a "Negro"), all the attributes of the stereotype was inferred at full strength. Secord (1959), in a follow-up study, found that there was no tendency among the subjects to reduce stereotyping when photographs were more caucasoid in appearance. Responses to the photographs was found to be independent of whether the picture series was black and white or black only.

[3] In the editing process, many of the photographs had to be discarded to eliminate as much as possible those that, for one reason or another, had features which would possibly be a more powerful determinant of response than the racial characteristics of the scene. Some photographs were rejected because one of the students was strikingly muscular or notably puny; others because the boy on the floor was larger than the boy standing, so that the "obvious" interpretation of the photograph (a fight) would be unlikely; others because the race of one or more of the students was not immediately clear; and still others because the poses of the actors were not consistent with the other photographs.

[4] No attention is given in the present paper to the effects of racial variations in particular roles and sets of roles, or to the interactions between the proportion of actors of each race in a photo and the roles played by them. The analyses we made of these matters yielded ambiguous but intriguing results, which demand replications of the present study and the designing of new studies particularly concerned with the "role" factor.

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EDUCATIONAL RESEARCH

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INFORMATION • INNOVATION

APPENDIX

Materials included with Photograph

CENTRAL MIDWESTERN REGIONAL EDUCATIONAL LABORATORY, INC.

10646 ST. CHARLES ROCK ROAD, ST. ANN, MISSOURI 63074 - 314-429-3535

Dear Student:

We are asking for a few minutes of your time to help us in a study that is designed to help us better understand how high school students respond to the theatre. This study is one of many that is being conducted in connection with the Educational Laboratory Theatre Project, sponsored by the Los Angeles City Schools and the Inner City Repertory Company.

Here is what we would like you to do. Inside this envelope is a photograph and several sheets of paper. Remove the photograph and one of the sheets. Fill in the information asked for at the top of the sheet (you do not have to sign your name), and then look at the photograph closely before reading the instructions. Then do what the instructions ask. (There are questions on both sides of the sheet.)

When you have finished, recheck to make sure you have supplied all the information asked for. Then put both the photograph and the sheet back into the envelope. When everyone is finished, pass the envelope up to the front of the room or give it to the person assigned to collect the envelopes.

We hope that you find participating in this study interesting. If you have any questions about the purposes of the study, please ask them after all of the envelopes have been collected.

CEMREL, Inc.
ESTE

Photo
#1a

NAME OF SCHOOL_____

NAME OF ENGLISH TEACHER_____

YOUR GRADE (circle one) 10 11 12 YOUR SEX (circle one) Male Female

Below are the titles of the plays presented in the past three years by the Educational Laboratory Theatre Project. Please put a check mark on the line in front of the title of each play that you have seen.

____Tartuffe	____Raisin in the Sun	____West Side Story
____Sea Gull	____Our Town	____Room Service
____Glass Menagerie	____Macbeth	____Antigone
____Midsummer Night's Dream	____Fantasticks	

____I have seen none of the plays.

PART ONE: The accompanying photograph is of students rehearsing for a play about conflicts between groups of students in a modern big-city high school. Study the photograph carefully; try to imagine what happened to lead up to this particular scene; try to imagine what may happen next. Then pay particular attention to the boy second from the left, the one who is on the floor. Then in the space below, and on the other side of this sheet if necessary, write about this character. Tell us, for instance, such things as who he is and what sort of person he is; tell us what his relations are to the other three characters in the scene; tell us what he has just done or had done to him, and what he will do. Write, in other words, a short story about the scene in the photograph, centering your attention on the one boy. Refer to the photograph as often as you wish, and use details from the photograph in your story.

PART TWO: Now that you have thought about the scene in the photograph, and written a story about it, how much would you like to see these students performing in the play? To indicate the strength of your interest in seeing the play, check one of the statements below.

_____I wouldn't miss it

_____I would like very much to see it

_____I might go see it if I had a free evening

_____I would go see it only if everyone else was going

_____I would go see it only if forced to

_____I wouldn't go to see it under any circumstances